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ORIGINAL ARTICLES.

SPASMODIC TORTICOLLIS AND ITS MEDICAL RELATIONS.

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Before a body of learned specialists, an elementary review of the subject of torticollis would obviously be out of place. Certain facts, however, owing to the paucity of our knowledge on the subject, demand repeated and careful consideration. Ordinary fixed wry-neck, is of some interest to the neurologist inasmuch as most of the cases owe their origin to some primary disease of the muscles, generally the sterno-mastoid. As a result either of congenital lack of development or of trauma received during birth, the sterno-mastoid of one side is shorter than its fellow, and at the same time is rigid and sclerosed. That, however, fixed wry-neck is not always to be ascribed to this cause is shown by cases reported in which the affection was due to a tonic spasm of one sterno-mastoid, the spasm in turn being due to, or associated with, some affection of the eyes. Wadsworth (Trans. *American Ophthalmological Ass'n.*, 1889, p. 381), reports such a case under the title of "Spasmodic Torticollis Apparently Due to Faulty Position of the Eyes and Cured by Tenotomy." Landolt (*Bull. Med.*, 1890, IV., 573), records two cases, one associated with paresis of the left superior oblique and another associated with paralysis of the fourth pair of nerves. Inasmuch as both cases declined operation, the causal relation of the eye symptoms could not be determined. Of the three cases reported,

two occurred in young children and one in a girl of seventeen. All had existed since early infancy. These cases are important as indicating a possible relation of cause and effect existing between torticollis and eye-symptoms in children. That, however, some of these cases are due neither to eye troubles, nor to trauma received in childbirth, nor to faulty position of the head in utero, but are really due to defective development, is made probable by the observation of Osler (*Archiv Pediatrics*, 1892, p. 81), who noted the association of congenital wry-neck, with marked facial asymmetry.

Spasmodic Torticollis is an exceedingly interesting affection, because of the numerous and varied character of the problems which it presents. We know little of the physiological action of the motor nerve cells, and of muscular tissue, while of the pathology of spasm we know still less. There is probably, further, some good reason why local spasms predominate in the regions of the face and neck, but all that we could say at present would simply be speculative.

Regarding spasmodic wry-neck, we must, it seems to me, admit the following propositions: First, spasmodic wry-neck, is not necessarily spinal accessory spasm. While it is true that the sterno-mastoid and trapezius are decidedly involved in the majority of cases, the spasm is frequently not limited to them, but involves other muscles. Further, cases are on record in which no spasm in the spinal

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accessory distribution was present at all, and in which, notwithstanding, rotatory spasmodic movements of the head occurred. Again, muscles other than the rotators of the neck may also be involved. Secondly, the constantly recurring rotation of the head is at times the outcome of purely local conditions, and in that sense is a local spasm; at other times, though more rarely, it is the outcome of the action of physiologically associated centers in the upper cervical cord and medulla, or, more rarely still, of the morbid action of a motor centre in the cortex, and in this sense resembles a volitional movement. Both of these propositions seem to me to be of great importance.

Regarding the first, it is frequently possible, by the careful study of the movements of the head, and of the action of the muscles of the neck to determine which of the muscles are actually at fault. However, this can often be done only approximately. The first point is, of course, to determine whether or not the spasm is limited to the spinal accessory supply. If not, what other muscles are involved. The importance of this study, in view of operative procedures, cannot be overestimated, and doubtless is one of the reasons why some cases of resection of the spinal accessory nerve are successful and why others fail.

Having carefully studied the movements and the muscles involved, the next point that suggests itself is to determine whether the case presents physiological associations of different and distant muscle groups. This association is seen at times in the concomitant spasm of both trapezii, and of the anterior belly of the occipito-frontalis, or of the elevators of the upper lip. There is present at times, also, an associated movement of the arm on the affected side. If this movement be in extension and pronation, it is probably a physiological association. Though of great importance, it is not always possible to differentiate between a purely local spasm and a movement indicative of some perversion of the normal physiological action. If such a differentiation be possible it is of the utmost value in suggesting to us the position of the lesion, if any. From what we know of facial spasm, we have a right to infer that the lesion may be situated either in the cortex, lower nerve center, or in the nerve trunk.

It is probable that the larger number of cases, with which we have to deal, are cases in which either the grey matter of the upper portion of the cervical cord and medulla is involved, or in which the nerve trunks of the spinal accessory, or of the cervical plexus are at fault. Certainly if the cortex were more frequently affected, we should expect, as Gowers points out, associated movements of the eyes. These are practically never observed. It is true, however, that other associated movements, especially movements of the arm and forearm are very suggestive of cortical disease. Pressure points, so frequent in facial spasm, are, as is well known, rare in torticollis, nor do we often have painful points over the spinal accessory or other nerves. Such a painful point was present in a case for a time under my observation, and was situated over the spinal accessory nerve. The subsequent history of the case, however, the nerve being excised, proved that the case was not one of purely accessory spasm.

Regarding the various medical measures for treating these cases, it is hardly necessary that I should go into detail. All present are familiar with the utility of such drugs as gelsemium, conium and morphia—and also their failure to cure—at least, in the vast majority of cases. It is hardly necessary that I should dwell upon the various other agents at our disposal—massage, electricity, and rest in bed—as they give only amelioration and fail to cure. It is to the surgeon that we turn, sooner or later, with the hope of securing for our patient decided, if not absolute relief.

Those who follow me this evening will, of course, have a great deal to say about the various surgical procedures that have been instituted. Certain facts, however, present themselves for mutual consideration. First and foremost of these is section, or rather excision, of a portion of the spinal accessory nerve. This expedient yields in a large number of cases marked benefit, and in some instances it is followed by a complete disappearance of the spasm. In three of my own cases, however, it gave comparatively slight relief, the reason being, doubtless, that the spasm was more or less generalized, other muscles being involved. One of these cases I had the opportunity of following up, and later, at

my suggestion, Dr. Keen operated upon her, resecting the posterior divisions of the first three cervical nerves. The operation had originally been suggested by Dr. Wier Mitchell. This expedient was followed by a very decided relief, though at last accounts the spasm had to some extent returned.

We can readily understand why if the spasm be very much generalized—if a physiological movement be represented by it—that the number of muscles involved may be very great. Thus, in addition to the trapezius and sterno-mastoid, some, or all, of the following muscles may take part: the splenius, the rectus posticus major, the rectus posticus minor, the trachlo-mastoid, the complexus, the obliquus capitis superior, the obliquus capitis inferior, the semi-spinalis, the semi-spinalis dorsi and the multifidus spinæ. This array of muscles shows the utter hopelessness of securing absolute or permanent relief in some cases by any operation on the peripheral nerve trunks. However, such operations should always be attempted provided the case be not clearly proven to be of cortical origin.

It is both interesting and gratifying to learn in this connection that Dr. Keen's operation has been successfully repeated by Dr. C. A. Powers (*N. Y. Med. Jour.*, 1892, page 253). The patient was one in which there was very little involvement of the spinal accessory supply. Dr. Powers adopted the expedient of Dr. Keen, and the result was a complete cure. Mr. Noble Smith (*Spasmodic Wry-Neck*, [London, 1891], has also performed the operation with a successful result. The recurrence of rotatory spasm after such extensive resection of nerve trunks as was practiced on the case reported by Dr. Keen, seems to point to the cortical origin of the disease. The propriety of a cortical operation in such a case naturally suggests itself and deserves serious consideration. The centre for the rotation of the head being situated, approximately at least, in the posterior portions of the first and second frontal convolutions just in advance of the arm centre, it would be, surgically, very accessible and could probably be electrically determined at the time of operation. Inasmuch, however, as the centre for rotation of the head and neck appears to be closely associated with that for conjugate deviation of the eyes, such an opera-

tion should only be contemplated as a dernier resort.

Regarding other surgical procedures, such as stretching of the spinal accessory nerve, or tenotomy of the sterno-mastoid muscle,—they merely deserve mention. They are little more than makeshift expedients. However, an operation devised by Collier (*Lancet*, 1890, I, page 1354), deserves special mention. Collier, it will be remembered, tried the effect of a ligature upon the spinal accessory nerve. The ligature was a silver wire and was twisted with sufficient force to lightly compress the nerve fibres. Strange to say, the expedient was entirely successful, the spasm ceasing absolutely. The same expedient was, however, repeated by Drs. Mills and Deaver with failure as the result.

DR. THOMAS H. MANLEY, surgeon of the Harlem Hospital, New York, read a very interesting paper before the section of railway surgery at the Pan-American Medical congress on "Torsion and the homologous ligation of divided arteries." After treating the subject in his thorough, scientific and practical manner, the doctor makes the following conclusions:

Whether homologous ligation or obturation of arteries, the former by a living tissue and the latter by torsion of the vessel, possess any enduring value, experimental work and clinical observation alone will decide. Torsion is a very ancient expedient, which suffices for the diminutive and superficial vessels, but for those very deeply lodged or those of very large caliber, it has not been very generally trusted until recent times. Since the attention of the profession has been called to the subject by Professor John B. Murdock, who has revived it on a large scale, and has shown that with the perfected technique, with modern dressings and the elimination of suppuration from fresh wounds, its application has a very large field. As for homologous ligation, I am firmly convinced that with the onward march of progress in the near future, the question of perfected hemostasis will be definitely settled. Time and opportunity permitting, it will be my aim to continue my experimental work, and test to the fullest this species of automatic obturation in the human subject, and report final results later.—*Buffalo M. and S. Jour.*

COMMUNICATIONS.

TREATMENT OF VENEREAL BUBO.

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In considering the treatment of venereal bubo we must give careful consideration to the exact condition of the glands when the case is presented, also to the cause of the bubo. By venereal bubo we understand any inflammation or enlargement of the lymphatics of the groin, dependent either upon gonorrhoea, chancreoid or syphilis. We will therefore consider the treatment in the following order: First, sympathetic inflammation of the inguinal glands from gonorrhoea or chancreoid. Second, virulent or specific bubo. Third, the indurated bubo.

In treating the usual form of bubo from gonorrhoea or chancreoid, namely, sympathetic inflammation of the inguinal glands (I use the word "sympathetic" for want of a better one to express the meaning), all steps should be taken to subdue the inflammatory process. First, by relieving the cause, viz, gonorrhoea or chancreoid. Second, by such direct application to the glands as will tend to lessen the inflammatory process. First, then, I should advise absolute quietude, rest in the recumbent posture, with the constant application of ice to the inflamed gland. Also an injection, with a hypodermic syringe, of a one per cent. solution of benzoate of mercury, which seldom has to be repeated. If necessary, it may be injected again five or six days later. If circumstances are such that the patient cannot be kept still, I should use the benzoate of mercury, advising the patient to apply ice with the ice-bag as often as possible. Sixteen drops of the one per cent. solution should be injected well into the substance of the gland, and a compress bandage should be applied and renewed twice every twenty-four hours. Welander, of Stockholm, claims ninety-one per cent. of cures of all buboes which had not reached the stage of suppuration, with this treatment. Letnick, of Odessa, out of one hundred and forty cases, claims complete resolution in one hundred and twenty. In the remaining twenty suppuration had

begun before treatment was commenced, and he was compelled to incise the tumor. He proceeded as follows: Having made antiseptic the inguinal region, sixteen drops of one per cent solution of benzoate of mercury was injected into the swollen glands. Then a compress bandage, consisting of antiseptic cotton and a linen bandage was applied. The patient was required to observe the most perfect quietude during the entire treatment. I deem it unnecessary to even mention the many other methods that have been resorted to in venereal bubo to avert suppuration, since statistics show results from this plan which far exceed all others.

If a bubo has not reached the point of suppuration when a patient presents himself, every effort should be made to prevent it, but if we fail after six days it is useless to try longer and we should encourage suppuration and bring it on as quickly as possible. When suppuration has taken place, and we have a soft fluctuating tumor, the gland should be incised, making an opening sufficiently large to allow the ready and easy emptying of its contents. The cavity then should be thoroughly washed out with hot sterilized water, using a small syringe for the purpose. Then inject a one or two per cent. solution of nitrate of silver and apply a compress bandage. Afterwards the cavity should be cleansed twice daily with a hot boric acid, or bichloride of mercury, solution, or with fresh peroxide of hydrogen, and iodoform, iodol, aristol or eucrophen thoroughly applied. While it would be better to keep the patient absolutely quiet for a week or ten days, it is not a necessity. The majority of patients will not submit to it, but attend to their business without serious inconvenience.

Dr. A. Cavazzani, of Venice, recommends the following powder as a dressing after the incision of suppurating buboes.

R Iodoform..... Siss.
Salicylic Acid
Subst. Benz..... 55 Sij.
Pulv. Camph..... 5ss.

M.

The advantages he claims for it are:
1st. It prevents shrinking of the edges of

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the wound, so frequent with iodoform, and which so greatly retards cicatrization. 2d. It rapidly deterges the wound and almost completely suppresses suppuration. 3d. Under its influence the inflamed and tumefied glands rapidly diminish in size, and granulations spring up in abundance, in consequence of which cicatrization is greatly hastened. In many cases where suppuration has been slow and the glands have been inflamed a long time, it is well to curette after the pus is evacuated, but this is not often necessary.

Pontan treats suppurating buboes by puncturing the tumor, allowing the contents to escape, then injecting a ten per cent. mixture of iodoform and vaseline. He claims cure in six to eight days.

Teaclke makes an incision about one-third of an inch in length, through which the contents escape. The cavity is filled to distension with tincture of iodine. The iodine is then pressed out and an antiseptic dressing applied, and over this is placed a large sponge, covering the entire inflamed area. In twenty-four hours this dressing is removed, and all fluid remaining in the sac pressed out and the dressing re-applied. While his treatment is painful, he claims rapid cures.

Wertheim advises puncture of the tumor with a large aspirating needle, through which most of the fluid is drawn, then a four per cent. solution (eight or ten drops) of muriate of ammonia is injected. As the fluid in the cavity accumulates it is again

tapped and treated in the same manner.

Zeisse applies compresses wet in a solution of subacetate of lead, and keeps the patient confined to bed. As soon as pus is formed it is evacuated by means of a small puncture. When in spite of drawing of the pus there are marked symptoms of inflammation, the skin is laid freely open, the cavity curetted and packed.

In the treatment of bubo there is no doubt but it would be better to excise the gland as soon as it becomes inflamed and close the wound by suture, thereby getting union by first intention. But circumstances will not often admit of this, as the majority of patients refuse positively to submit to it. Where suppuration has set in, I do not believe that anything can be gained by excision over free incision, curetting the cavity if necessary and applying an antiseptic dressing.

In the treatment of the virulent bubo of chancre, after free incision has been made, we must regard the cavity as a chancre and treat it accordingly. Thoroughly cauterize the walls of the cavity with nitric acid and then apply iodoform and a compress bandage. Cleanse and redress the wound twice a day. It is first a suppurating bubo, but after it is incised and its contents emptied, it remains a chancre.

Syphilitic indurations of the inguinal lymphatics need no local treatment whatever, as they seldom suppurate and gradually disappear under the influence of proper internal medication.

GASTRO-JEJUNOSOTOMY FOR MALIGNANT OBSTRUCTION OF THE PYLORUS; DEATH FROM ASTHENIA ON THE EIGHTH DAY.

JOHN B. ROBERTS, A. M., M. D.,* PHILADELPHIA.

A man, aged fifty-eight years, presented himself to me with the history of having had some pain in the abdomen and some digestive disturbances for nine or ten months. About four months previously to his consulting me he had noticed a small tumor at the umbilicus, which after a time became slightly ulcerated upon the surface. The tumor on examination was about an inch in diameter and seemed to involve the entire thickness of the ab-

dominal wall; no attachment to deeper structures could be detected. The sallow complexion of the man and his general debility led me to believe that there must be some deeper growth. Examination of the chest revealed nothing especially abnormal, and nothing of importance was detected in the urine. The fact that violent vomiting occasionally occurred led to the suspicion that there might be malignant disease of the stomach and that the umbilical tumor which was evidently malignant was a secondary growth. Investigation of the

*Read before the Phila. Co. Med. Soc., November 22, 1893.

contents of the stomach, obtained by the use of the stomach-tube, showed an absence of hydrochloric acid in the secretion. Examination by means of the gastrodiaaphane gave no evidence of any growth involving the anterior part of the stomach, for the trans-illumination seemed perfect. The vomiting of large quantities of food led me, however, to make a diagnosis that there was some pyloric obstruction.

On October 7, 1893, the interior of the stomach was washed out thoroughly and the abdominal cavity opened for the purpose of exploration and the probable removal of the umbilical growth. Introductions of my finger revealed a tumor about the size of a woman's fist, involving the pylorus and the surrounding structures. As it was evident that the umbilical tumor was unimportant in comparison with the graver lesion of the stomach, I determined to leave the former untouched and make an anastomosis between the stomach and the jejunum. A loop of small intestine was fastened to the anterior wall of the stomach by two lines of continuous silk suture applied according to the method of Lembert. A row of interrupted sutures was then placed at the points where I desired the intestinal and gastric walls to come together in front of the proposed anastomosis. These sutures were left long and the stomach and intestine held apart so as to give me room to make an incision in both organs. At the ends of the proposed apposition, no sutures were applied as I believed I could protect the peritoneal cavity there with sponges until after the interrupted sutures in front were tied. The intestine was kept free from intestinal contents by two pieces of rubber drainage tube passed through the mesentery and loosely tied around the bowel, above and below the site of operation, so as to occlude its lumen.

The gut was then opened by an incision, two and a half inches long, made at a point opposite the mesentery and between the suture lines. The mucous coat was brought into contact with the serous coat of the bowel by whipping the edges of the intestinal wound with a continuous silk suture. The stomach was opened in the same way between the lines of suture, and its mucous and serous covering stitched together by a continuous silk suture whipping the edges. The inter-

rupted sutures applied along the anterior portion of the apposition were then tied and reinforced with an outer continuous suture. Afterward stitches were applied at the ends of the space apposed so that there was no possibility of leakage between the approximated surfaces. The abdominal cavity was then washed with hot water, and the parietal wound brought together. A continuous catgut suture was used for the peritoneum and the skin was united with silk stitches. The umbilical tumor was allowed to remain.

The operation was a difficult one on account of the manner in which the stomach was made immovable by the size of the growth involving its pyloric end. The patient reacted well, though the shock was marked because of the length of time required by the operation. There was some vomiting for a few days, the vomited matter being sometimes dark in color and fecal in odor. At first, feeding by the rectum was employed and the stomach given entire rest. At the end of about three days small quantities of food were administered by the stomach, and dilute hydrochloric acid given to allay the tendency to vomiting. This seemed efficacious and he took a fair quantity of whiskey, peptonized milk, beef-tea, and beef-juice, and retained these articles well. He died, however, of asthenia on the eighth day. For several days before death no vomiting had occurred and food and stimulus were taken quite freely. Strychnine and quinine were administered in the effort to keep up his strength, the quinine being given by the rectum, the strychnine by the hypodermatic method and by the stomach.

An autopsy was made a few hours after death. The abdominal incision was united superficially throughout its entire length. There was no evidence of suppuration and no redness. When the skin was pulled apart with the fingers about a drachm of yellowish fluid was found between the peritoneum, which was united, and the skin; and under each end of one of the sutures was a little hollow about the size of a pea in the superficial fascia. This fluid looked like pus, but was apparently lymph which had filled the space not closely brought together by sutures. The haste with which the sutures were applied because of the patient's depression caused the muscular tissues to be drawn together

imperfectly. As has been said, the peritoneum was united by first intention; and there was no evidence of septic peritonitis in any part of the abdomen. The peritoneal cavity was free from fluid, and the seat of operation was in a perfectly aseptic condition, the jejunum and the stomach being well united. The great omentum was found adherent to the anterior wall of the belly in the left hypochondriac region in front of the normal omental attachment to the stomach. Behind the coil of jejunum which was attached to the stomach by the operation there was room to pass four fingers with ease. The stomach was not much dilated; the malignant growth occupied both anterior and posterior walls, nearly one-half the distance from the pylorus to the cardiac end.

The anastomosis had been made just beyond the diseased area in the anterior wall of the stomach. The jejunum was supposed at the time of operation to have been twisted by me so that the contents of the stomach would flow into the intestine in the direction of the fecal current. The specimen shows that this was not accomplished and that the bowel was not turned as I had supposed. The size of the growth, occupying the pyloric end of the stomach and involving contiguous structures, was about three inches in diameter and irregularly globular. Its size and the infiltration of surrounding tissues account for the difficulty found at the time of operation in bringing the stomach into the wound, although the wound was four inches in length. The omentum was adherent at one or two points along the suture line of the anastomosis on the intestine; for about four inches below the anastomosis and about eight inches above that point the jejunum was somewhat dilated. Some small malignant nodules were scattered throughout the liver, and one or two similar spots of disease were seen on the surface of the intestines. The lungs were not removed, but seemed normal except some pleural adhesions at the apex of each lung. The heart was small but was not opened. The jejunum had been united to the stomach about four inches from its upper end. The union was perfect and the amount of lymph uniting the stomach apparently small. The superficial sutures were visible, particularly at one spot where the bond of lymph had been separated a little by the

traction made during the removal of the specimen. The omentum lay behind the coil of jejunum which had been brought up to be united with the stomach. The communication from the stomach into the jejunum was found patulous, but admitted only two fingers from the stomach into the jejunum. There was no evidence of unhealthy inflammation at any point of the operative area. The edges of the opening into the stomach where the suture was used to whip the edges were united, as were the edges similarly sutured in the intestinal wall. The intestine when laid open showed that the communication between it and the stomach was satisfactorily healed on the intestinal side as it had been on the gastric side. The intestine below the seat of opening presented a congested appearance of the mucous membrane. The pyloric orifice of the stomach was contracted and surrounded by malignant masses. It would just permit the passage of the tip of my little finger passed from the stomach into the intestine.

The most important lesson in the case is the fact that a two and a half inch orifice between the stomach and jejunum had contracted in eight days so that it was only about one and a half inches long and would admit but two fingers.

What the Doctor Gave Him?

It is not often that one hears a really new medical story, but the following has every appearance of freshness and originality:—Long ago, a man went to Dublin to order a coffin for Pat Connell. "Dear me," said the undertaker, "Is poor Pat dead?" "No, he's not dead yet," was the reply, "but he'll die to-night, for the doctor says he can't live till the morning, and he knows what he gave him." The above anecdote occurs in Mr. Le Fanu's recently-published book, "Seventy Years of Irish Life."

LUBRICANT FOR CATHETERS.—Castor oil is an excellent material for this purpose. It is non-irritating and tenacious. It should always be applied warm, and the bottle containing it should be frequently washed with alcohol. It can be used for silk and rubber catheters alike.—**DR. J. M. KITCHEN.**

THE TREATMENT OF SPASMODIC TORTICOLLIS BY CONIUM.

WHARTON SINKLER, M. D., PHILADELPHIA.

The treatment of spasmodic torticollis is most unsatisfactory. The pathology of the affection is so obscure that rational treatment is all the more difficult of application. Dana, speaking of wry-neck, says: "In rare cases it is cured, in many others it can be ameliorated, but it generally reaches a certain stage, and then remains chronic." Drugs of all kinds have been recommended in the treatment of this affection, and splints and mechanical appliances are not only of no benefit, but usually aggravate the affection. From the fact that frequently the muscles principally involved are the sterno-mastoid and the trapezius, the affection has been supposed to be due to disease of the spinal accessory nerve, and the treatment has been directed to this nerve.

Counter-irritation, galvanism, and actual canterly applied as near as possible to the origin of the nerve, have been used, but with far from satisfactory results. Surgical measures, such as stretching this nerve, and the excision of a large portion of it, have been resorted to, but in only a small proportion of cases has relief followed the operation. It is, therefore, evident that the disease, except in rare cases, involves the deeper muscles of the neck, as well as the sterno-mastoid and trapezius.

Lezynski recommends the use of belladonna, given in increasing doses almost to the point of toxic influence, and keeps this up for four or five weeks. He has had marked success from this method, and Gray states that since he has followed Lezynski's plan, he has cured eight cases of spasmodic torticollis by the use of belladonna. I have used this remedy myself, but without success.

The best results which I have seen from drugs in this disease, have been from the use of conium. This drug was recommended by Harley many years ago, in the treatment of spasmodic affections, but it never has been used extensively. G. M. Hammond reports the successful treatment of a case of painless facial spasm by the use of this drug, and Rockwell, of New York, recommended it in the treatment of chorea. The text-books, however do not speak of it favorably. Hare,

in his work on Therapeutics, remarks, "that conium holds an unimportant place in the drug list of to-day." I have found in my own experience, however, that it is decidedly useful in many forms of muscular spasm when not due to central causes.

From experiment, it has been found that conium causes paralysis of the motor nerves when given in physiological doses. There are drooping of the eyelids, staggering and inability to walk, showing its influence upon the muscular system. It is, therefore, reasonable to expect that in the treatment of muscular spasm, when peripheral in origin, that the remedy would prove useful.

Harley recommended the juice of fresh leaves, but this is difficult to obtain and the fluid extract is a reliable preparation. The dose in which it is recommended in the text-books is entirely too small to be efficacious. I usually begin with fifteen or twenty drops, three times a day, and frequently increase the dose to sixty drops. There are two fluid extracts in the market: one of the leaves, and the other of the seeds. I usually give the latter.

I have seen several cases of spasmodic torticollis which were relieved by this remedy, and two or three cases of painless spasm which were distinctly benefitted by it use, in one of which the spasm entirely ceased. I will relate two cases to illustrate the successful employment of conium in spasmodic wry-neck.

CASE 1. Mary C., aged 26, a shirt maker by occupation. Her general health has always been good, and there is no history of special interest in connection with her present trouble.

She applied for treatment at the Infirmary for Nervous Disease, December 12th, 1887. She stated that two weeks previously there began a sense of trembling in the neck, and a heavy feeling in her head. At the same time the head began turning continually to the left side. On examination the head is found to be rotated strongly to the left shoulder. It can be turned to the front but can be held there but a few moments, when it is again rotated to the left. If the head is

held by force in a straight position there are felt strong spasmodic contractions of the sterno-mastoid and the trapezius muscles. She cannot turn her head as far to the right as to the left. There is no pain or tenderness over the vertebrae, soreness in the sterno-mastoid muscle or sensitiveness over the points of emergence of the spinal accessory nerve.

A blister was applied over the point of origin of the spinal-accessory nerve, and galvanism was used quite faithfully for four months; cod liver oil was administered and the patient was advised rest. But little change took place during this time, except that there were two brief periods of improvement, once after the treatment had been changed to the iodide of potassium. At this time the sterno-mastoid and trapezius had become more rigid, and the head after being voluntarily rotated to the front would be drawn to the left within a few seconds by the spasm of the muscles.

The patient was now ordered the fluid extract of conium in ascending doses, beginning with five drops, three times a day, and the maximum dose reached was twenty drops three times a day. This treatment was pursued for twenty days, when the improvement was so great that the head could be held straight for several minutes. The conium was continued until the patient was well, and when seen a few months later, the patient said she was entirely relieved of her trouble. A year later there was a slight return of the spasm for a few days, but this again yielded, in a short time, to conium.

CASE II. Miss G. M., aged 44 years, was admitted to the Infirmary for Nervous Diseases August 28th, 1893. Family history unimportant. She had always been well until four years ago. In November, 1888, while at work she became dizzy and fell, remaining unconscious for a few moments. It was found afterwards that her shoulder had been dislocated by the fall. The dislocation was reduced by a physician within a short time, but there was partial loss of sensation in the arm, and this has continued ever since. The head was turned towards the left immediately after the fall. The left ear almost touched the shoulder, and the head was so much rotated that the chin reached the point of the shoulder. The head remained in this position for two or three

days, when it gradually came back to the normal condition.

After the first fall she had dizzy attacks every two or three weeks; she did not become unconscious, but for a few moments she could not see and would then fall. The head would assume the position above described after each attack, would remain turned to the left for a few days and then resume the proper position.

While the head was drawn to the left shoulder, she could place it in other positions with her hands, but it would immediately return to the position of rotation to the left from the spasm of the muscles. After a time the attacks of vertigo became as frequent as two in a week.

In February, 1893, she had a severe attack, in which she did not fall, but she saved herself by sitting down in a chair. She was not unconscious, and could walk, but became rigid for half an hour. The head was drawn down until it reached the left shoulder. After this attack she was in bed for six weeks, and during this time she states that the whole left side was somewhat contracted. She had no falling attack since February, 1893.

On admission, the patient was found to be a well nourished, muscular woman; digestion normal; heart and lungs healthy; and the urine free from disease.

There is no paralysis of motion and sensation is normal, except in the right arm and shoulder, where it is delayed and diminished to tactile and thermal sense. The knee jerks are normal on both sides. The elbow jerk is exaggerated on the right side, but normal on the left. When sitting up, the head is drawn to the left and rotated so that the chin is turned towards the shoulder. All the muscles which turn the head towards the left, seem to be involved, but especially the right sterno-mastoid and left trapezius. She can turn her head to a normal position but cannot hold it there for more than a few seconds, when it is again rotated violently to the left. When she is lying down, the head becomes almost straight, and the spasm of the muscles does not occur. There has been, at times, a sharp pain in the left side of the neck in the trapezius muscle, but it is now a dull and dragging sensation. The facial muscles have never been affected.

If the patient places her right hand on the side of her head, so as to rest the head upon it, the head will turn to an erect position. The patient was ordered rest in bed, with general massage, faradism to the neck muscles, and the fluid extract of conium, 20 drops, three times a day, to be increased.

On September 7th, that is nine days after the treatment had begun, the patient was taking thirty drops of the fluid extract of conium, three times a day, and it was noted that the head was decidedly better, that she could hold the head straighter, and that when sitting up the head did not so frequently rotate to the left side. On the 14th of September, the patient was still improving. She could hold her head perfectly straight,

without support, for a few minutes. She has less of the dull feeling and dragging sensation in the left side of the neck. The improvement continued, and on the 5th of October, the patient was able to hold her head absolutely straight, without any pain whatever. She was discharged from the Hospital, October 16th, entirely relieved of the spasm of the neck muscles, and seemed to be in perfect health otherwise.

Some of the attacks from which this patient suffered were undoubtedly hysterical and it is probable that the spasm of the neck muscles was also of an hysterical origin. The trouble had lasted for over four years, and was not relieved until she was placed under treatment by the use of conium.

THE HYGIENE OF THE EYE.*

F. C. HEATH, A. M., M. D., INDIANAPOLIS, IND.

Next in importance to life itself is the faculty of vision. No man, be he Croesus or Vanderbilt, would consider his fortune for a moment in comparison with his eyes. How, then, to preserve the eye in a healthy state becomes an interesting question not only to the doctor but to every seeing member of the human family. Preventive medicine has here a field of transcending importance.

It may be said in a general way, that the eye is much affected by the constitutional condition and, therefore, is concerned indirectly in all measures of general hygiene, but it is the special hygienic measures necessary to the preservation of sight that claim our attention in considering this subject.

No feature of face or form compares with the eye in beauty and expressiveness, and as seen in childhood, with lustre undimmed by age or accident and with conjunctiva uncolored by disease or drug, it is to the oculist what the finest of paintings is to the artist.

First in time as well as importance comes the eye of infancy. To produce an ideal child it is said that we should commence two hundred years before he is born—to get good eyes would require

equal attention to antecedents. But taking things as we find them, what is our first duty? Immediately after birth the child's eyes should be wiped with a clean cloth (the lids being closed). In bathing the first time, keep the water of the bath from the eyes—then clean them with cloth and clean water, dropping in one drop of a two per cent. nitrate of silver solution. This simple course, if followed by all obstetricians, would reduce the cases of blindness at least ten per cent. This I believe to be the ideal method for lying-in hospitals and for all cases of suspicious vaginal discharge in the mothers. How far it can be employed as a routine in private practice, or what substitute should be used, may be left to the judgment and the conscience of each practitioner.

Attention to cleanliness, general hygiene, and protection from too strong light or other injurious influences, suffice until our babies have become school-children.

In Germany and in some parts of this country, the hygiene of the eyes of school-children has received considerable attention but, in general, far less than the importance of the subject demands. Pre-eminent among the dangers at this stage is the production or increase of myopia

* Read before the Miss. Val. Med. Ass., 1893.

or "near-sightedness." This may result from prolonged use of the eyes on near objects, especially under unfavorable conditions. It was found in Germany, that myopia increased from twenty per cent. in the lower grade schools to sixty per cent. in the higher. Of 1133 school children whose eyes were examined in New York, less than four per cent. were found near-sighted at seven years of age, but nearly twenty-seven per cent. at twenty years. The practical point in the investigation was the discovery of the unfavorable conditions and their removal as far as possible.

Bad air and excessive heat were found to affect the eye muscles by enfeebling the system, and to indirectly increase myopia by tending to congest the eyes. A still greater factor in this direction is working in an improper position—with the head bent over a low desk, for example. The failure to regulate the height of desks according to the size of the pupils is about on a par with that method of distributing army clothing condemned by Dickens on the ground that "the tall soldiers got the short pantaloons and the short soldiers got the long ones." If desks are too low or of improper slope, or if seats are uncomfortable, the children are likely to lean forward, resulting in the double harm of congesting the blood-vessels and bringing the eyes too near to their work.

Perhaps the most important consideration, here, is the direction and amount of light. Cohn, who examined the eyes of over ten thousand school children in Germany, found 1.4 per cent. of pupils in *village* schools near sighted, and 11.4 per cent. in the *city* schools similarly afflicted, the difference in the proportion being attributed, principally, to the fact that the city schools were darkened by the height of surrounding buildings, while the village schools stood by themselves and obtained light in abundance from all sides. Defective light works injury by causing pupils to bring their work nearer, to make up for the deficiency. Too strong light, or light shining directly in the eyes, irritates the retina and conjunctiva, and also causes too close approach to the desk in bending to avoid the glare. The light should come preferably from the left side.

The kind and duration of work are the other factors worthy of special mention in the hygiene of the eyes of school-children.

Small and indistinct print acts much like defective light. Greek and German text are especially trying. Writing with pale ink should not be allowed. Written examinations should not be too frequent. It will be admitted that written work, from its tendency to exactness, is a desirable educationable feature, but it should be employed far less than at present, when it is, undoubtedly, injuring the health and eyes of thousands of pupils and of teachers as well. The hours of study, too, are much too long, and intermissions are too short and too infrequent. Intervals of rest greatly relieve the eyes. If all students were to cultivate the habit of looking up from their books frequently to think over what they have been reading, it would be a source of great mental improvement as well as affording the eyes much-needed rest.

The removal of the above unfavorable conditions as far as possible, according to Von Hippel, has reduced myopia in Germany at least six per cent. In the face of these facts, is it not high time that we were doing something to arrest this growing evil in our own country? The responsibility rests largely with physicians as leaders of society and conservators of public health and welfare. Concerted action under our leadership should accomplish as much here as has been accomplished by the labors of our professional brothers in Germany.

Our school-children graduate and enter different lines of business, each perhaps with its especial dangers to the eye. Stone cutters, machinists, and those in exposed vocations, are liable to various accidents, especially from foreign bodies in the eye. Hence they require some form of protective glasses. These may be of glass, circular in shape, but if we wish to make them unbreakable, they should be of mica or wire gauze; these are, however, open to the objections that they obscure the light to some extent, and, if in the form of goggles, retain the moisture of the eye and hence may increase the irritation. To those whose work requires facing strong lights like the electric arc light, the best protection is in the smoked glasses. These should not be too dark, and should be worn only when absolutely necessary, lest they render the eye more sensitive to light than before, besides causing eye-strain from efforts to see through them.

The habitual use of these glasses from slight and insufficient causes is getting to be a very common mistake, indeed, it might well be added to the list of humanity's self-imposed ills as the "smoked-glass habit." These remarks are, of course, not intended to preclude the use of protectives when needed by actual disease or marked photophobia. They may, then, furnish great relief and even prove curative by affording rest and freedom from irritation. Blue glasses exclude heat-rays and lessen color rays, but give less protection than smoked and are less comfortable; other colors are far more objectionable. Shades, veils and curtains have their uses, also to be governed by the principles already laid down plus such common sense as the special occasion may demand.

In cases of severe disease and after operations, dark rooms may be an occasional necessity, but their bad influence on the minds and bodies of patients being appreciated, they should be used only when unavoidable, and then for but a short time.

Rest should be considered as one of the most important factors in treating diseased or strained eyes; rest of eyes, body and mind. Avoidance of wind, dust and smoke, or protection from their evil effects, must not be neglected.

Personal habits enter into the question of causation of eye disease, and their regulation becomes, therefore, a part of the preventive or hygienic treatment. Sexual excesses undoubtedly contribute to the production of muscular asthenopia and hysterical amblyopia and photophobia, besides affecting the conjunctiva indirectly through their influence on nasal catarrh. Tobacco and alcohol have their well-recognized amblyopias. Lack of bathing the eyes properly may result in conjunctival trouble. Use of water, both cold and hot, may have a place in the hygienic treatment of diseased eyes. Employ, as a rule, that which is the more grateful to the patient: cold usually for conjunctival diseases and injuries; hot for iritic and deeper troubles, avoiding anything like a poultice. Indeed, there should be a limit to cold applications lest the nutrition of the cornea become enfeebled, while that delicate tissue requires still greater care in the use of hot applications (seldom exceeding one hour at a time) from fear of maceration and consequent ulceration. Diet is important chiefly

through its effects upon indigestion and general health, which frequently have much to do with the condition of the eye.

A few words as to abuse of eyes may not be amiss. The first offence in this line is reading with a poor light—requiring the ciliary muscle to do extra work to sharpen the vision. This applies to dim light, twilight, sitting too far from the light, etc.

The second offence is error of posture—stooping or lying down congests the eye, besides requiring unnatural work of the eye muscles.

Reading on trains is our third offence, the motion causing such frequent changes of focus and position as to tax the muscle of accommodation as well as the muscles of fixation, so to speak.

Reading without needed glasses or with badly fitting ones is our last, but not least, offence. Aside from the various well-known reflex effects of eye strain, the danger to the eye itself is not to be slighted. Eye strain is certainly a factor in producing disease of almost every part of the eye, its most serious effects being choroiditis, glaucoma and cataract.

Old age is the time of retribution for eye-sinners—it calls for little in a special hygienic way beyond the occasional stimulating washes and the careful husbanding of what sight remains.

Fortunately the surgeon's skill can give nearly all sufferers from cataract a greater triumph over their troubles than is afforded any other sufferers whatever, yet it is only after quite a period of darkness in waiting the ripening of the cataract.

In this brief space, exhaustive treatment of the subject is out of the question, but our object has been accomplished if these hints lead to greater attention to an important field which has been sadly neglected.

A PHYSICIAN who got rid of some of his steel instruments and bought others made of aluminum says that he is sorry that he changed. The aluminum probes, sounds, tongue depressers, and that sort of thing do not oxidize, to be sure, but he finds that they are deficient in elasticity, and stay bent after pressure. He declares, moreover, that he likes to feel as if he had a hold on something when he uses an instrument, and aluminum is so light that it makes him feel as if he could put no trust in it.

INFLUENZA AND ITS TREATMENT.

CHARLES B. WILLIAMS, A. B., M. D.,* PHILADELPHIA.

Influenza (syn. Epidemic Catarrhal Fever, Contagious Catarrh; French, *La Grippe*) is essentially an epidemic disease, running a specific and definite course and characterized by a catarrhal inflammation of the respiratory organs and sometimes of the digestive. There is pyrexia and a great deal of constitutional disturbance, with marked debility and depression of spirits.

EPIDEMICS.—The first epidemic of influenza that has been recorded in any medical record, occurred in 1510. But there can be no doubt that Aristotle and Galen saw epidemics similar to those which occurred in 1510 and those which at irregular intervals have occurred in our own times. Among the chief epidemics of influenza are those of 1762, 1782, 1787, 1803, 1833, 1837, 1847.

Watson, in his "Annals of Philadelphia," states that Noah Webster in his work on "Pestilence" says: "The city was again visited in 1747, by bilious plague" preceded by influenza. Watson further states that in August and September, 1807, the influenza prevailed in Philadelphia. Then we have the epidemics of the last few years, occurring since 1889, with which we are all more or less familiar.

CAUSES.—The Italians, in the 17th century, ascribed it to the *influence* of the stars, hence the term "Influenza" (Ital., *Influence*), by which the disease is now known. The more probable and more generally accepted theory is that influenza is due to some minute organism of a specific nature, conveyed by the atmosphere and distributed over wide areas. This organism, when introduced into the bodies of those affected, increases and multiplies indefinitely, and hence we have another source of infection in the breath, etc. Anyone having carefully observed the course of the present epidemic would not venture to question the contagiousness of influenza.

SYMPTOMS.—The period of incubation may last from a few hours to as many days, or may extend to two or three weeks. The disease usually develops suddenly with rigor or chills followed by fever, the temperature ranging between 101° and

103° F. The pulse, at first frequent and full, soon becomes soft, weak and slow. At the same time the patient complains of severe aching and shooting pains in the back, limbs, chest, neck and eyes. Sore throat is a marked early symptom of the disease. Then follow hoarseness, coryza, deafness, dizziness, and sometimes nausea and vomiting.

The local symptoms vary in individual cases, but as a rule they begin in the nose and conjunctivæ and extend downward. There is an abundant watery discharge from the mucous membrane, accompanied by sneezing, with impairment of taste and smell. The mouth, tongue and fauces are sore. The inflammation extends further down, ending in either a laryngitis or a bronchitis, with possible complications of pulmonary congestion, capillary bronchitis or pneumonia.

Some persons are much less susceptible to the disease than others, while on the other hand, some appear to be altogether insusceptible. Influenza can hardly be termed a dangerous disease unless it ends in pneumonia. It is occasionally fatal to infants and to aged people. Then, as so many persons in every large community are "tottering on the brink of the grave," the influenza proves the immediate cause of the increase in the death rate during the prevalence of an epidemic.

The prognosis is especially grave in chronic pulmonary or cardiac disease. Hæmoptysis may not unfrequently occur in those predisposed to it. The writer has seen an example of this occurring in a patient residing in Montgomery County, Penna. The prognosis is also grave where there are evidences of weak circulation, or symptoms of adynamia, as in diabetes, Bright's disease, fatty heart, etc.

TREATMENT.—There is no specific for influenza, but it is possible, and indeed it is often highly important, to arrest the disease, or diminish its violence at its onset.

In the first place, *all* cases should be kept indoors, in a cool room, well ventilated, but free from draughts. If the case is seen early, Pulv. ipecac et opii gr. x., either alone or in combination with Pilocarpinæ hydrochlorat. gr. 1-4,

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taken at bedtime with a hot lemonade, will do a great deal towards diminishing the violence of the attack.

The above treatment will be found to ameliorate considerably the pains and cough, and the patient will feel relieved by morning. Quinine is a remedy usually well borne, and in combination with Strychnia, gives good results, especially where there is marked debility. The following formula will be found to be of excellent service in this stage.

R Quinine sulphatis vel Cinchonidinæ salicylatis.....gr. xvij.
Strychninæ sulphatis.....gr. ss.
M. et div. in pill.....no. xij.
Dispense in capsul.
Sig. One pill t. i. d.

Should the patient still complain of pain or be restless at night, small doses of ext. Opii may be conveniently added to the above formula.

A prominent symptom of this year's epidemic has been a severe supra-orbital neuralgia, attended sometimes with shooting pains in the frontal sinuses. Indeed the neuralgia has shown a tendency to persist long after the active symptoms of the gripe have subsided. This pain may be due to pent-up nasal secretions or, on the other hand, it may be purely neuralgic. However, the following treatment will usually afford relief: Internally, large doses of the salicylates, preferably, Ammonia salicylatis gr. xv. q. q. h., and the instillation of a drop or two of a 1 per cent. solution of Cocaine hydrochlorate into the nostril of the affected side. If there is occlusion of the nares from pent-up nasal secretions causing pain in the frontal sinuses, then the occasional use of Dobel's solution with the atomizer, may be all that is necessary to relieve the patient.

One can readily see that the treatment of influenza resolves itself almost entirely into symptomatic treatment.

For the bronchitis that usually follows: In the early stages the following formula, advised by Dr. H. C. Wood, is valuable:

R Potassii citratis.....℞ss.
Succus limonis.....℥ss.
Syrup. Ipecac.....℥ssij.
Glycerinæ.....℞ss.
Aque.....q. s. ad ℥ij
M. Sig. ℥ij, q. s. h.

Should there be extensive bronchitis and the secretions accumulate, and there are evidences of pulmonary congestion, then Antimonii et potassii tart. gr. ss., may be conveniently added to the above formula. Eucalyptol vel Terebene, m v.

in capsul. q. q. h. will also act well in this complication.

Where expectoration has been established and is no longer tenacious, an expectorant mixture containing Ammonium chloride may be substituted for the above.

Alcohol in the form of brandy or whiskey, and best administered in egg-nogg or milk punch, is required where there is much debility and in old persons who need stimulus, from the start of the disease.

The diet must depend on the individual case. Should the case be a severe one, large quantities of concentrated liquid nourishment are required. Usually most patients, in the first few days of the disease, refuse nourishment in any form whatsoever. The writer has found that boiled milk seasoned with a little salt, will be taken and relished by these patients who could not be induced to take any other food.

During convalescence, tonics together with nourishing food and some mildly-stimulating beverage, as wine or beer, are required. Change of air is beneficial, but the patient must guard against taking cold and sustaining a relapse.

On Tobacco Smoking.

Gounod loved his pipe dearly. In this connection the following words of his have an interesting bearing on tobacco smoking and its effects:

I admit sincerely the truth of Tolstoi's opinion in all that has to do with the intellectual faculties. I think that the habit of using tobacco produces a sluggishness of these faculties, that this sluggishness follows upon the habit, and by abuse may reach even to atrophy. I am not so sure that it could possibly result in the annihilation of Conscience, whose witness is too startling to undergo so easily an eclipse so disastrous. I say Conscience, be it noted; I do not say Will. Conscience is a Divine decree; Will is a human energy. The latter can be weakened by abuse of the organs; the former, however, seems to me quite beyond all effect of the sort, because it creates the responsibility without which man ceases to be amenable. I have smoked a great deal. I do not recall that it has ever modified the judgment of my conscience on the morality of my acts.—*Review of Reviews.*

TRANSLATIONS.*

A CASE OF INCARCERATED HERNIA OF A DIVERTICULUM OF THE INTESTINE.

Dr. E. v. Laczkovich says diverticular herniæ of the intestine are rare, and still more rarely do we find an incarceration of the same. Mery in 1701 was the first to report such a case. Meckel's diverticulum, which can be regarded as the only true one, is formed by a partial opening left from the ductus vitello-intestinalis or the omphalo-mesaraicus, and is found along the ileum about 1 m. from the ileo-cæcal valve. Several other authors have described isolated cases (Walter, 4; Grendig, 1; Gravitz, 1;) in which a diverticulum was found at the jejunum but regarded as identical with Meckels.

In the case reported, a diverticulum of this description was found incarcerated in the right inguinal ring. The hernial sac contained nothing but the diverticulum. The constriction was located beneath the diverticulum, inclosing a portion of the intestinal wall. The case is interesting aside from its rarity, by the fact that the partially gangrenous intestine, was neither reduced nor resected, but following the advice of R. Graefe and Th. Rorsing, it was left, outside of the abdominal cavity in its hernial sac, after having released the stricture and removed all constricting tissues.

This treatment was followed by good results, in spite of the presence of greyish spots in the prolapsed tissue and the opaque appearance of the peritoneum. The intestines, on the day following, showed such marked improvement in color and general appearance that reduction could be performed without fear.

The report is as follows:—J. S., age 56, was admitted on September 13, 1892, to the surgical department of the general hospital at Budapest. History was as follows:—On the 9th of September, while lifting a heavy piece of machinery, weighing 50 kg., he suddenly experienced great pain in the right inguinal region, followed by swelling. In spite of the increasing

pain, he worked until the 11th, on which day he was unable to get up. After another attempt on the 12th, to continue his occupation, he found himself compelled to go home and go to bed. A physician was called, who diagnosed incarcerated hernia, which he attempted to reduce without success. Careful examination showed a swelling, the size of an egg, in the right inguinal region, painful upon pressure. The skin could be lifted and was of normal consistence. Abdomen slightly tympanitic; some inclination to vomiting; last movement September 9th; pulse frequent and compressible.

Incarceration having existed four days, no attempt was made at reduction of the tumor, but herniotomy was at once decided upon. After opening the hernial sac there was an escape of about one teaspoonful of reddish-brown, opaque, odorless fluid. The sac contained a prolongation of the bowel, about 3 cm. long, 1½ cm. wide; its upper portion was dark red and lustreless, with numerous greyish patches. After loosening the stricture and separating the fibrinous attachments formed in the ring, the intestine was drawn forward, which showed plainly the constricted portion, which was, however, not yet gangrenous. The suspicious appearance of the above-mentioned attachments induced the author to surround the intestine and pack the opening with iodoform gauze, leaving all within ready access. After the operation free movements of the bowel occurred. On the 14th of September he changed the dressings. The intestine, appearing normal, was replaced; drainage tube inserted; wound closed with sutures and dressed with iodoform gauze. Free bowel movements daily. The patient was discharged on the 27th inst., cured.

This case is similar to that of Graefe and Rorsing, and the result being equally as good, affords encouragement to adopt the treatment in such cases where gangrene is not complete.—*Centralb. f. Chirurg.* No. 36.

—W.

* Translated for THE MEDICAL AND SURGICAL REPORTER by the translators M. B. Werner, M. D., and W. A. N. Dorland, M. D.

THE PLASTIC FORMATION OF A SPHINCTER FOR THE LARGE INTESTINE.

In the year 1889, the author, Prof. R. Gersuny, Vienna, (*Centralb. f. Chir.*, No. 25,) described a new operation for the correction of incontinence of urine. The method consisted in dissecting from the adjacent parts, the urethra, which was then twisted on its long axis, presenting a corkscrew appearance, after which the urethral orifice was united to the surrounding tissue by sutures. This presented an elastic resistance to the contents of the bladder. The author reported at the same time, the history of a patient so operated upon, and also the persistent cure after a longer period. The only possible objection, if it could be called that, being that the patient required more time to empty her bladder than if she had a natural sphincter.

The success of this operation induced the author to carry out the same theory where extirpation of the lower portion of the rectum, including the anus, became necessary for the removal of carcinomatous degeneration. He presents with history,

two cases upon which he performed this operation. He was enabled, after having extirpated the diseased tissue, to draw the bowel down to the integumentary incision, having previously twisted it on its long axis—as he had done with the urethra—and fix it to the skin with sutures.

Recovery was prompt. Union perfect in both cases. Both were enabled to retain even watery stools. Shortly before leaving the hospital, a digital examination was made in each case, which resulted in finding a circular, elastic constriction of the lumen of the bowel, 2 to 3 cm. above the external opening. The mechanism of this closure rests chiefly upon torsion, and its success upon the normal elasticity of the tissue. This is particularly essential if the cures are to be permanent.

A correspondence after discharge from the hospital, brought satisfactory answers, the one eleven weeks, the other sixteen days after having left the hospital.—*Centralb. f. Chirurg.*, No. 26. —W.

SELECTED.

THE PROFESSIONAL HORIZON.

DAVID W. CHEEVER, A. B., M. D.

Audi alteram partem.

The master mariner in olden times scanned the horizon, watched the currents, estimated the tides, studied the winds to guide the good ship on her course. All these were variable and changeable; but the magnetic needle, the sun, moon, and stars were unvarying guides. So the modern steamship master may disregard the winds, surpass the tides, defy currents and storms; but yet he is always dependent on the compass, the quadrant, and his solar and stellar observations for his position, his progress, and his prospective voyage.

Thus, too, the older surgery, contending with obstacles and evading dangers, by its care and skill, although by devious routes, often landed its patient safe at last.

While modern methods, more rapid and direct, may lead straight on to recovery

and to life, yet, although newer observations, newer science, newer instruments of precision, may modify and may advance modern surgery and medicine, the principles of the science and art remain the same as they were before; and, if disregarded, they lead to failures in practice, or at best to temporary success.

In scanning, like the old sailor, the professional horizon, may we not learn from the omens of storms or calms, where we have gone astray from the unerring guides of sound professional principles?

The unbalanced predominance of operative surgery has destroyed all natural and harmonious proportion between operations and surgery; and between surgery and medicine. Antisepsis has insured an immunity which over-emboldens the operator, and which substitutes the precipitate certainty of an incision for the well-con-

sidered conservatism of diagnosis and delay. No one can deny that anæsthesia first, and antiseptics next, have enormously increased the domain of operative surgery. No one can assert that much of this is not both useful and hopeful. And yet, in proportion to other surgery, operations should fill a second place. The rare has become the common, and the common has been pushed aside and neglected. Contusions, abscesses, fractures, varicosities, atheroma, are the every-day things we always see; and abdominal diseases have usurped undue attention, and displaced the common classes of surgical events.

Diseases of the joints, affections of the lymphatic glands, maladies of the bones, ulcers, the endless variety of affections of the rectum in modern sedentary life,—these, like the poor patient, we have always with us. Such cases filled the text-books, and supplied a large part of the surgeon's practice. But to-day, if the student or practitioner opens the pages of the present surgical text-books, he finds that genito-urinary surgery and that of the abdomen and the brain occupy one-third of the space. Pages are devoted to the multiple and fancy stitching of an intestine, and a paragraph suffices for piles; yet one hundred people have piles, and require treatment from the surgeon, to one who has intestinal obstruction. The new is interesting, the new is important; but it is overdone. Perspective is lost: the natural proportions of classes of cases obscured. Rare things are magnified; common things are overlooked.

There is also constant danger of confounding functional and temporary with organic and permanent conditions: of operating for a symptom, and finding a phantom tumor. Visceral surgery replaces therapeutics. Forlorn hopes are common operations. Exploratory incisions made for diagnosis may be often innocuous where no disease is found, but are very fatal where organic and incurable affections exist. It used to be said that it was fatal to explore a tumor, outside the body, unless you could take it out. It is equally dangerous and often fatal to explore a visceral tumor, in spite of antiseptics.

Is there not danger, also, that the ease of looking breed littleness of wit; that intuition, that sum of experience, may shrink and waste, when unused; that the balancing of chances, the estimating of

probabilities, the struggle for a diagnosis, may be belittled in face of reputed certainties revealed by a cut, and thus delay sober judgment? Is not the therapeutic use of drugs also much unlearned by this fatal ease of operating? Obscure brain affections, nervous habits, apparently organic and incurable growths, sometimes yield to medicine, and escape the knife. We may not often thus succeed; but does not the fact that we do not try medication lead finally to a loss of knowledge as to the chances of a trial?

Specialties magnify regions, distort wider vision, focus the attention on a point and ignore a more important whole. A diathesis, a constitutional bent, often directs or influences the general progress of a disease. A symptom may be local, or general. If local, it is seen; if general, it may be easily overlooked. Habit may perpetuate an epileptic crisis in spite of the operative removal of the local cause of the aura. A vent boldly given to a subarachnoid hemorrhage may not prevent a fatal result due to the plugging of the nutrient vessels of the pia mater. Clots in the spinal canal may be absorbed, sometimes, with less hazard than by removing the laminæ and uncovering the spinal cord.

The treatment of the diseases of women has become almost purely operative. Attention to constitutional treatment is thus easily diverted.

The sexual maniac is spayed, often without lasting relief. Pelvic cellulitis and peritonitis not very rarely are lighted up by hasty interferences with the interior of the uterus.

Life is occasionally shortened by too early removal of innocent growths about the ovaries and uterus. So intensely has the attention been called to the right iliac fossa, that an appendicitis is suspected in every colic; incisions are sometimes made before walling off has occurred; an organ removed which was the seat of only temporary catarrhal obstruction, and the adhesions of an excision substituted for the adhesion of a transient inflammation.

Is any incision harmless? Certainly it is not. A scar is left; sensibility is increased. If in the abdomen, the binding power of the fasciæ is weakened. Hernia may result; or, at any rate, prevention may require an abdominal supporter to be worn ever afterwards. In gunshot wounds of the intestines a certain percentage of

cases may recover without operation. Extravasation may be prevented by the pouting of the mucous membrane through the perforation of the ball; and the latter may be discharged *per rectum*. Of course, the majority die. But so, unfortunately, do most of those operated on. The history of such cases is scanty, the pathology new, the results few. Let us by no means discourage research, experiment, or even operation; but let us make haste slowly.

In the charm of asepsis, in the ease of healing, in the painlessness of operations and of recoveries, we are apt to overlook that great factor, shock. The effect upon the nervous system of a disease, an injury, an operation, is hard to estimate. It often turns the scale against recovery. Especially about the neck; in the three great cavities of the body; in any operation on the extremities which approaches the centre, the results of prolonged and teasing operations are often fatal through profound and prolonged shock. It has been recently advanced that age makes little difference in the prognosis of an operation,—an opinion from which we absolutely differ. No one who has watched the old but has seen prolonged shock of the nervous system, and evidences of impaired mental activity, long subsequent to operations of even moderate severity.

The somewhat ungrateful task of advancing heretical opinions, in the preceding remarks, can be condoned only from our profound conviction that the operative *furor* of modern surgery is resulting in a serious detriment to the best qualities of sound diagnosis, sound pathology, and surgical therapeutics: to diagnosis, because we do not exhaust means of harmless research; to pathology, because we operate to know what is the matter, and not from proved pathological processes and results; to therapeutics, because we neglect much that can be accomplished by regimen, by rest, by sedatives, by alteratives and by time.

When we survey the medical horizon, we find equally great changes. That harmony of knowledge and character which made the general practitioner many-sided, but symmetrical—*Sapiens, teres, atque rotundus* (Horace); that self-reliance which equalized extremes, balanced chances, judged impartially—have been sadly damaged by the fatal facility of the habit of consultations and by the narrowing spirit of specialism.

A great ignorance of the simpler products and processes of pharmacy has accompanied as great a lack of careful study in therapeutics. The medicine is now made to hand for the doctor by steam and chemistry; and the useful combinations of older drugs are swept aside.

Bred myself in an era of therapeutic nihilism, experience has failed to confirm my unbelief. On the contrary, long trial has convinced me that we can accomplish much with a few, well-selected, familiar and potent remedies.

If the surgeon and physician have changed, the lay public has changed faster. Credulity is undiminished. Modern witchcraft rivals the older kind. Therapeutic nihilism has become a system and a school of medicine. Practice has lost its stability. Formerly there was a family physician, whose patients retained him as a familiar and much-used fixture until he died. Now he shares a family with others; and he does not look on any person as his patient for life. This is a greater loss to the community than to the doctor. We regret, but we yield to these revolutions.

Meanwhile should we take a depressing view of our professional future? By no means; for never was surgical and medical science so bold, so advancing, so successful. Never was the young doctor so well educated as now. Never had he so large a clinical experience before entering on practice.

Moreover, partly from this cause, and partly from the mutable character of modern society, the young physician or surgeon never succeeded so fast, as now.

The future is full of hope. Knowledge advances. Hygiene and preventive medicine prolong the average of life. Zymotics are to be stamped out. Bacteriology is to revolutionize therapeutics.

We, who have once ploughed the land, look back across the furrows of time, and gather new hope, as we see the renewed greenness of the fields of science, cultivated as they have never been before.

Only would we insist on the caution begot of experience, on the value of the past.

Let us advance firmly and with a confident heart, still holding fast to that which is good. The magnet does not vibrate. The sun and stars are eternal in their courses. Nothing can deflect from his course him who studies, hopes, believes, works.—*Bul. Harv. Med. School Assn.*

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SATURDAY, JANUARY 13, 1894.

EDITORIAL.

INCREASE OF INSANITY IN THE UNITED STATES.

Statistics are notoriously elastic; that is to say, almost any proposition can be mathematically proved either true or false according as figures may be manipulated. At the same time statistics afford us the only method of measuring any proposition of very extensive and general scope.

The Government decennially takes an account of stock in order to gain information regarding itself. Now the census has been made to include items pertaining to public and private affairs, so that one may almost say the very hairs of his head are numbered. But the census reports can only be regarded as approximate estimates, and not accurate statements of the conditions dealt with.

The last census of the United States indicates that the increase of insanity has been proportionably much greater than the increase of the population. This rapid increase is more accurately demonstrated by the periodical reports of institutions for the insane and of public officials who take exact cognizance of the insane under treatment or care, at definite dates, from year to year. These reports show

clearly that the number of the registered insane has much more than doubled during the past two decades, while the census shows for the same period that the population of the United States had gained about sixty per cent.—being about forty millions in 1873 and about sixty-five millions in 1893.

The proceedings of the Conference of Charities at Chicago show by official reports that in many of the States the increase of the registered insane has been astounding. Thus in Rhode Island, where, in 1873, only 150 persons were in the chronic insane asylum, there are now some 600—four times as many; though the State population in the twenty years had gained only from 235,000 to 370,000—sixty per cent. In Iowa the count of the insane went up from 600 in 1873 to 2,385 this year; the population in that period having gained from 1,320,000 to 2,000,000—or fifty per cent., but the insane having more than trebled. In Kansas the population rose from 475,000 in 1873 to 1,500,000 in the present year; but the insane reported twenty years ago were but 200, where now

they are almost 1,500. In New York the gain of population was from 4,600,000 in 1873 to about 6,500,000 this year—less than forty per cent.; but the insane have risen from 7000 twenty years ago to more than 18,000 this year, gaining nearly one hundred and sixty per cent., or four times the general rate. Ohio, with an increase of inhabitants from 2,800,000 in 1873 to 3,800,000 now, apparently shows an increase of her insane from 3,147 to 8,500—one hundred and seventy per cent. as against thirty-six per cent. gain in the total. But of all the States Illinois gives the greatest proportionate surplus of insanity; for while her population gained from 2,700,000 twenty years ago to 4,050,000 now,—fifty per cent.—her

registered insane, according to the Conference report, went up from 642 to 4,867, or a gain of six hundred and sixty per cent.

These reports, of course, are only in general terms, and may be full of unrecognized errors; but they are correct enough to evidence the general fact that insanity is on the increase.

The causes of this increase are numberless and are not restricted to any locality or, indeed, country. It is believed that a similar increase is shown among all civilized nations. These facts are of direct interest to physicians by virtue of their profession; especially so is the conclusion that seems inevitable—that chronic insanity is virtually incurable.

CORRESPONDENCE.

EDITOR OF THE MEDICAL AND SURGICAL REPORTER:

I have read attentively the letter of your correspondent in the issue of December 23, on "A plan to remedy the dispensary abuse," and I regret to find no suggestion as to a remedy for the abuse.

Your correspondent dismisses the subject with the assertion that "there is no reason why the general management of the dispensary system should be disturbed," thus leaving the matter just where it has been for a long time, and if the members of the profession are satisfied, there is no reason why the writer should not be.

The subject is not one in which the writer is *personally* particularly interested, and his only motive in considering the matter at all was in behalf of his professional brethren.

It is all very well to clamor for reform, but if we stop there, what have we accomplished?

What we want is a practical plan upon which to *work* for the desired reform, and it was with this view that "A plan to remedy the dispensary abuse" was proposed, with no idea that it was perfect!

It seems to some after carefully reading the scholarly letter of your esteemed correspondent, that our proposed plan with

modifications and elaboration, might be made to cover many of the abuses which he so ably and truthfully portrays in his letter.

There can be no doubt that we need "organization" and "discipline" to accomplish anything, and it was with the hope that our medical societies would take the matter up for consideration, that we ventured our suggestions. We still hope for criticism of our plan and for suggestions as to a better scheme by which the profession can be helped.

Nothing but prompt and decisive action will be of any avail, and who will take the initiative?

It is easy to exclaim, "*impractical*," but let each one propose a better plan, then we may expect from the multitude of counsel to formulate something that will meet the case to the satisfaction of all, but we cannot anticipate much help from those who are selfishly interested in continuing the abuse. I hope to hear from more general practitioners in regard to the subject which should be of great interest to them.

Fraternally yours,

ALFRED K. HILLS.

December 29, 1893.

ABSTRACTS.

SICKNESS AND PAUPERISM.

L. L. BRYANT, M. D.*

There are over 8,000 histories of families who have applied for public aid on file in the office of the overseers of the poor in this city. This represents 24,000 names, in round numbers which appear on the pauper books of Cambridge. To this list, names are continually being added at the rate of 1,500 a year. What are we, as a Society, doing to prevent this? The question has often been asked me: "What are you doing?" and I have many times propounded the same question to myself. This paper is written in the effort to reply. In the month of May, 1883, ten years ago, I was elected to the office of Assistant City Physician. The said office was created December 1, 1880, to enable the local Board of Health to conform to statutory law and yet retain the incumbent City Physician, Dr. Henry P. Walcott, a man occupying an honored position in the State Board of Health, and standing deservedly high in the respect and esteem of the people, and of this Society, of which he is a member.

My predecessor, Dr. O. C. Turner, a most estimable man, died in October, 1892, of typhus fever, contracted while in harness; and during his illness, and subsequently until my election the affairs pertaining to the office were satisfactorily conducted by my friend, Dr. Wetherbee.

With a nervous organization particularly susceptible to external influences, and with absolutely no knowledge of the refinements of modern economics as applied to the poor, I sought and found the office which I still occupy; and my only qualifications were a fair knowledge of general medicine, and that experience which usually follows the first few years of practice subsequent to graduation.

The gaunt, hollow-eyed, cadaverous poor, having nothing and wanting everything, I knew nothing about, and as little what to do for, or with. Entering the service of the city under the circumstances, and in the conditions mentioned, I first made myself acquainted with the duties prescribed by the city ordinances.

*Assistant City Physician of Cambridge, Mass.

I found the office of the overseers of the poor to be the abiding place of one of the most perfect systems with which I had ever been made acquainted, with its thousands of histories of individuals, each one necessary to the proper registration of an applicant for aid and the establishment of a legal settlement, numbered, indexed, and filed away in bound volumes. I found in this office all the usual machinery and labor-saving devices necessary to the conduction of a large business, and presided over by a secretary, D. P. Muzzey, devoted to his work; and apparently constantly employed. I found that all appeals for assistance must be made to this secretary, who was empowered by the Board to dispense the city funds at its command as it deemed for the best interests of the applicants, and then to so manipulate the official machinery in the interest of the city as to secure from the various cities and towns wherein they had resided long enough to acquire a settlement, a monetary equivalent for everything paid out and for all services rendered. I found that the fixing of a settlement on some other city or town was one of the most important duties of the office, and required the service of a so-called "visitor," who, likewise, was apparently constantly employed. This labor necessitated calling on the applicant, asking for, and recording various personal questions, searching city and town records to prove the truth or falsity of his or her statements, and, in general, the making of such a return to the office as would enable it to form as accurate an idea as possible of what he had been, what he was, what he wanted, and how we are to get anything back?" I found that the secretary was the confidential clerk and advisor of the Board, the disburser of supplies, and came into more intimate relationship with the Board, the poor, and the general public than any one else, and conscientiously performed his duties.

The visitor, Vespasian Danforth, enjoyed the distinction of being considered one of the best versed men in pauper law

in the State. Both of these public servants were ever on the watch for fraud, and worked the machine, seldom allowing sentiment to change the order of its working. Not but they were susceptible, but experience continually taught them that yielding to it was an unprofitable indulgence save as a reflection from the Board. I found as a working formula that the overseers of the poor expected me to visit such of the poor of the city as the secretary should direct, prescribe for them as my judgment dictated, and to suggest to the office anything which I might consider to be the policy of the city to do in the direction of relieving their sufferings and distresses, or tending towards making them better law-abiding and self-supporting citizens.

Of all classes, the poor seem to be the one easiest to prescribe for, their wants being few and simple, and one's mistakes are so easily buried. I went into the work largely for the salary I was to get. I did not love the poor, that I can remember, except in an offhand sort of way, and I am not certain just how much I have acquired; but I soon found that there was something more for me to do than to issue dogmatic instructions as to medicine and diet. These must often be furnished; and not alone diet and medicine, but everything my patient's condition sets up within me the want for him to have, but there was more than this.

The labors of the Board, with which I was connected, were not only directed toward relieving paupers, but toward the prevention of pauperism. The more I became acquainted with the office and with its efforts in this direction the more apparent became the responsibilities which I had assumed; and often, as the magnitude of the efforts of others in charitable work have become known to me, my own have seemed so futile, that a morbid sense of my unfitness for the work that was gradually unfolding itself oppressed me. To-day, all the Utopias of which I may have dreamed, are vanished. I feel that I have acquired what the boys call a "crust," from off which smiles, tears or curses alike glide, and if ever unpleasant reminiscences assail me I pull myself up out of the pessimistic slough, with the comforting thought that I have done my duty as I have seen it, and have earned my salary.

The man in private practice has his

pensioners to whom he gives or withholds according as his emotional centers are affected. Nowhere have I found such tenderness, devotion, sacrifice, and forgetfulness of self, as that exhibited by the members of the medical profession, particularly for the worthy poor; those unaggressive individuals whose morals, or "rules of conduct considered essential to social existence," appear like ours and have not altered under poverty's pressure; those who suffer and are still, and who practice virtues we do not ourselves possess. This is often, however, but the chrysalitic or transition stage preceding their development or degeneration into the unworthy class.

The unworthy poor are those who do not approach or appeal to the average medical man as he fondly imagines that he would, were he in the same financial condition. There is an aggressiveness and an insolence about them that is repellant, and which gives one the impression that the same force economically applied would make them independent of others' assistance. But the law knows no such distinction; sickness levels both to the same plane, and as the medical officer of the city the fact that I am to care for any one being established, I have nothing to do with his morals except where their deflection is the cause of his disease, and must use the same circumspection for all alike.

Upon going out into the homes of the poor, I found there the hard, coarse, hell-side of life. I found as types, the nice old lady who wouldn't for the world have her friends know that she felt obliged to have the city doctor; the tired-out, exhausted, poorly-feed, discouraged laborer; the thin, hatchet-faced mother, daily rubbing her very life into the washboard, while the father stays at home and minds the babies; the broken-down beat and bummer, with his trembling muscles and his protestations of sobriety; the sick infant, left to the care of one scarcely older than herself; the dirty, lousy syphilitic; the consumptive and chronic rheumatic, waiting for and looking forward to death; the criminal imbecile, fool and insane man; and the little children prematurely aged and kept at home at scullion's duties. Seldom I found the square, honest, upward energetic look, but oftener, the inert, downward, sneaking, leering glance, with the light reflected from the white of

the eye. Here a woman asserts that she is sick, that her husband has rheumatism, or that her child has a contagious disease, that I may be induced to request of the office, fuel or groceries. Here is an intelligent man of the genus tramp. I met the same man last year, and the year before that. The nights are getting quite cool now, and he concludes that it is about time to go into winter quarters. Leisurely he makes his way to the office, and informs the officer there that he would like to go to the almshouse. Asked why he does not go to work he replies with an injured air that he has a pain in his back and cannot work. The officer demurs. The man grows persistent, and is finally referred to the doctor. The injected superficial veins and his general tremulousness tells their own story; but what about the pain in his back? Is there one of you here who is able to tell whether he has, or has not, a pain in the back? You are morally sure that he is a fraud; but who of you having the power has the courage of his convictions, and will say to that man, "No." No; public sentiment has not reached that stage where it will support any such decision, and we think again, and we find that it is true that he is not quite "up to concert pitch;" that he does need a little straightening out; and a doubt begins to frame itself that we have all the factors relating to that pain clearly before us, and the man goes to the almshouse.

Here the best that the house affords is his; food, clothing, bedding, pipes, tobacco, and that luxury of the modern hotel, a smoking room. Here in this steam-heated shelter, he whiles away the short winter days, sleeps through the long restful nights, grows fat, and perhaps, when the snows have gone, and the spring is well advanced, he ties up clothes in a bundle that he did not fetch with him, tells us that he has found work, and bids us adieu.

It is no state secret that public officers are largely at the mercy of a class of persons made sharp, keen and desperate by their fancied necessities, who are more difficult to manage than criminals because they are not under the ban of public censure, but hiding under the wings of public sympathy are in the position to dictate and the officers must obey. That this is true abroad as well, is asserted by Josiah

Flynt in the *October Century*, who says of Germany, the home of the most-advanced public efforts relating to pauperism to-day: "With all its groans under taxes, military and otherwise, it nevertheless takes upon itself voluntarily the burden of the voluntary vagrant—the man who will not work," and after giving a resume of the various methods and institutions employed, he adds: "But the man who will not work passes through these institutions as freely as the man who will."

And now, what shall I do with my patient? The therapeutics of pauperism, complicated with sickness, is somewhat different from that employed where treatment is confined to sickness alone. Both are morbid conditions, and either or both may be inherited, or acquired, or contagious. Both must often be treated at the same time, because if the treatment be limited to one, fatal results may accrue from an aggravation of the other. Together they make up a combination that in spite of the prayers, labors, study and money used and continually being used, is frightfully on the increase. When I do not know what to do I fall back on the machine. When I can care for my patients at home, I do so. When it is a question of hospital or almshouse, I send him to the almshouse. Why? Because it is cheaper. Surgical cases go to the hospital, because they have the appliances, and can command the skill which I do not possess.

As the years have gone by, I have been led to look into the "springs of man's action," in search of the causes of pauperism, and for additions to my armamentarium. I have found the truth of Bastiat's observation, that all economic movement may be resolved into "wants, efforts and satisfactions," terms correlative of those of the reflex process of ideation; perception, comparison and action. Want, according to Gunton, is "such conscious need of an object that its absence will cause sufficient pain to induce the efforts and sacrifice necessary to its attainment." "Want is the sole motive, and the only measure of effort, for no more effort is ever put forth than is necessary to secure satisfaction. Until a desire becomes so intense that more pain is produced by its non-satisfaction than will result from the labor and sacrifice involved in its gratification, it is not an economic

force of want, the need to consume being too weak to impel sufficient effort to produce."

I found that man's efforts tended towards the achievement of satisfactions that are "customary, and therefore demanded" by the best livers among those with whom he associates, the sum of which constitutes his "standard of living."

I found that perceptible advancement in one's standard of living was not a matter of days or months, but of years; and that any attempt to force its growth met with waste.

I found that the standard of living of the poor with whom I came in contact was not mine, was best ascertained by comparison—not with mine—but with those of a social equality with them, and that their efforts were then more intelligently directed along economic lines.

I found that history teaches that public aid does not strengthen but weakens, and breeds the disease called pauperism.

I found that it was not expected that this people should remain paupers, but that their necessities should force them to continue their efforts to keep up in the race.

I found, as Stoddard puts it, that "not what we would, but what we must, makes up the sum of living," and that sickness, sighs, tears and groans were not economic forces, but media through which one's ineffectual desires and efforts were communicated to others.

Physical disease is a common foe, without sentiment, smiting alike the rich and the poor who disobey the inexorable laws of health. Money will not propitiate it, years of penitence and years of prayer have not stopped its devastating onward march, and it is only when we add the sick man's ineffectual desires to our economic wants, and let our strength compensate for his weakness in a common struggle for a common satisfaction that sentiment is of value as a therapeutic agent. It is not the empirical sentimentality that gives birth to flowers, ice cream or religious tracts, but the kind that reaches down, grabs you by the hand and stands shoulder to shoulder with you in a *fight* with a common enemy.

I have found the same is true in the treatment of pauperism. It is not pity that comes in with tears, sighs and groans with which to fight tears, sighs and

groans, but that coming with the trumpet call to arms. There is a sentimentality, and affectation born of ignorance, money and fadism with which we all are acquainted. It looks right, but it rings flat. It takes a man up, toys with him until he ceases to be a plaything and refuses to be wound up, or to run right when he is, then it tires of him, and he is told that if he wants any more assistance to apply to the overseers of the poor. What can the poor devil do? Go to work? Where? What is the incentive to work? No, he has eaten of the tree of knowledge, his ambition and energy are sapped, his moral tone lowered, he cries inertly: "God help me, what can I do?" and he lets his wife and children work. He applies to the overseers of the poor and contracts pauperism. His children are taken sick. He is informed that he can have free medical attendance by application to the city doctor. Is his condition improved? Is the material condition of his family improved? Not as I see it. Down he sinks, lower and still lower in the social scale until, as the years come and go and his children reach the age when they should be self-sustaining, they too think and act along the same lines, and have an incapacity for economic effort. A glance at the histories on file in the office of any board of overseers of the poor will show this to be true, as will also a perusal of the history of the notorious Jukes family.

And now, what can be done to prevent a continuance of this state of affairs? Make no distinction as to worthiness or unworthiness, and keep the people from going to the overseers of the poor. That the men of some sections of the city are doing this I know, from the few calls I get in their locality.

As physicians we can not afford to shirk the responsibility which is clearly ours, by every law of scientific and human right.

We are scientists, striving to look through the maze of error and to discover the truth.

We are philanthropists by virtue of our profession, intrusted with the lives and the material happiness of our fellows, poorly paid for our services even by the wealthiest, and looking forward to the close of life, not with the expectation of leaving a large account to our descendants, but an example for their emulation.

We are optimists, too, ever looking for the best principles that move mankind. We come into closer relationship with humanity than pastor, priest or law-giver. Ours is the opportunity possessed by no other body of men, to inculcate those principles of thrift and independence which are the essence of true manhood, womanhood and American citizenship.

The individual study and applied efforts of each in a few instances will produce better results and more lasting satisfaction than with many.

In my own case I aim at quality and not quantity. I am not at all anxious to present a list of a large number of patients in my annual report.

When a man comes to me to be inoculated with pauperism and informs me that such a doctor always attended his family, but that he owes him a bill and is ashamed to ask him for further assistance, I send him at once to his physician; and I instruct him to tell his doctor his whole story, concealing nothing; and then to say to him: "Doctor I have no money, but just as soon as I can get work I will pay you a little at a time until my bill is paid." I have never known such an effort to fail.

A little story of Marshall Wilder's I sometimes use a therapeutic agent: "Two frogs fell into a pail of milk. One exclaimed: 'Help! Help! I sink! I drown!' The other answered gruffly: 'Kick! Kick; you little devil! Something will surely happen.' The first one continued to gasp and moan, and finally sank out of sight. The other kicked and kicked until nearly morning, when the milk having been churned to butter, he waked out into dry land."

DISCUSSION.

Dr. Morrill Wyman said he had not seen as much pauperism as the reader, yet he had had considerable experience with it. He told of one case rather remarkable, where the father a miserable fellow, became a pauper and the succeeding children, making three generations, followed his example. In the early days of practice there were few foreigners in Cambridge as compared with the present time and there was less pauperism.

Seeing a number of lazy-looking fellows loafing about a corner, only a short time ago, he accosted one who was smoking and asked how these men obtained a living; when he received the reply that their

parents went out to work and their mother took in washing. When asked what was to become of these men the fellow replied: "They will bring up in jail if they are lucky enough to escape hanging."

Dr. Hoarce Marion said the reader had presented in a forcible and illustrative manner many stubborn and stony facts. The subject is a broad one to grasp on which little literature has been published, and with foreign countries pouring in a constant supply of pauper, one of great moment for the welfare of this country. It is difficult to say what is best to be done, but it is certainly sure and important that patients should be kept away from the overseers of the poor.

The emergency societies are doing much to prevent the development of pauperism. Their method is to practically give them the articles they require, but at the same time to make them work and think they thereby earn them. A great part of the work Overseers of the Poor consists of the investigation of settlements; by this means a certain amount of money is refunded from the township whence the pauper came.

Dr. Taylor said in a few instances he had sent patients to the Overseers of the Poor, and thought it had a stimulating action, effecting the patient to do something for himself. He did not like to attend non-paying patients who live at a distance, neither did he think it right to send such patients for care to other physicians, although he knew instances where such cases paid something to the other doctor.

Dr. Clarke said when he came across long, tedious cases that required much care and medicine he usually referred them to the city physician. With poor patients who cannot pay, he is in the habit of making them do service of some kind in exchange for his advice, and thinks in many instances it has a good effect. Certain cases are too lazy to work. In Boston, certain institutions are in the habit of making applicants for meals work—sawing a quantity of wood, in compensation for the food given them. Some men will work hard and others prefer to go without a meal rather than work and earn it. He thought a similar line of action to this might be taken in Cambridge, and is of the opinion that most of the foreigners imported here are of an industrious nature and not inclined toward pauperism. The

West is largely built up of this class of people. The greater number of paupers are American born, and they form the worst class. Most foreigners come over here with higher motives than pauperism; they come to better their condition, and many instances might be quoted where they become prominent citizens, such as one he had encountered this summer at Chicago.

Dr. Norris differed from this latter view; he thought "the microbes were imported," and that paupers originated, at least, from the foreign element.

Dr. H. P. Walcott said his relations with the Government did not give him the intimate knowledge of the poor which Dr. Bryant possessed. He thought Dr. Clarke's statement worth consideration; it is certainly true that the worst class of paupers are those educated in pauperism, and that we have educated many of our citizens in this respect. We do not import many paupers now because our ports are guarded against the landing of this class, and a large number who come over are recognized as paupers and sent back. State and municipal aid are unfortunate for the poor, as such aid tends to make paupers of them.

DR. VAUGHN: Municipal and State charity is an irremediable evil. Brooklyn has cut off all outside aid; the burden is carried by voluntary organization. Public relief is not charity; it is compulsory to meet an evil that can not be helped. The taxpayer supports it. The associated charities and Overseers of the Poor work so closely together that the latter turn all cases over to the former for investigation. With more or less help from organizations to substitute the work of the Overseers of the Poor, he thought the public would be relieved of much of its pauperism; and he hoped the time would come when by the combined effort of the associated charities and other similar associations, the work would be entirely removed from the Overseers of the Poor.

It is now arranged so that a person can have his or her name erased from the books of the Overseer of the Poor, by paying back such sums as have been given.

Dr. Dow rarely sends a patient to the city physician; he explains that it makes paupers of them and usually they wish to avoid this condition, preferring to pay him

something for his service. He questions the wisdom of sending a visitor to the poor, because they are received as a distinguished visitor and not as a friend. The associated charities makes the poor reform without giving them much.

Dr. Lloyd thought the consideration of the poor at this meeting is in their relation to sickness, a complication of pauperism, and a very proper subject to be brought before the medical profession. The pauper is a person in a chronic condition of mental and physical weakness, and requires to be carefully studied, like crime or other diseases. The sick poor must suffer until means are found to obviate the condition of pauperism. This is an evil of civilization, and increases in ratio to the wealth and intelligence of the people. The condition may have come from the mental state of antecedents which have been introduced into this country, but not found among the earlier settlers. This foreign element diseased with crime, immorality, etc., give issue that are dealt with as American born citizens, live in and infect cities, cause crime, poverty and pauperism. All good citizens should act in conjunction to prevent the imposition of these people. The best way of dealing with this class is to make each individual believe he must be self-supporting; the poor man must be taught that he can and must do something for a living unless physically diseased.

Dr. Mahechne thought it did harm to help poor families; we are guilty of doing them an injustice when we do not make them pay their debts. There are few paupers in West Somerville, because the physicians there render such aid as is required of them.

Dr. Henry O. Marcy considered intemperance a great cause of poverty. He asked if the hard times had not increased the work of the overseers of the poor among the worthy poor. There are many Italians of the North end, Boston, who have less comfort than cattle. "He considered "educated men expensive animals."

Dr. C. C. Foster thought that children's homes contributed to the list of paupers, because the children were not taught how to work and earn a living.

Dr. Morrill Wyman asked if children that had been placed in the almshouse had any desire to return home?

DR. FOSTER.—No; they want to stay, and while there they hear the talk of the older paupers, which is vile and perfectly horrible for the ears of children.

Dr. Bryant in closing the discussion said that children in the almshouse were associated with old women and bummers; do not get the care or instruction which they should, become and remain paupers. The education of these poor children should be looked after. He considers the medical profession should be responsible for the

well-being and morals of all homes into which it is brought.

A district nurse is of great value, to instruct and make homes brighter and cleaner.

Seventy-five per cent. of paupers are of Irish descent; next come the Western Islanders and Portuguese. Poverty comes from intemperance and intemperance often comes from poverty; the poor wish to drown their care and sorrow in drink.—*Jour. Amer. Med. Ass.*

THE PROVINCE OF EXPERT TESTIMONY.

A clear exposition of the province of expert testimony is made by the Supreme Court of Jersey in *Kocis v. State*, just reported. In this case, attempt was made to prove that a foreigner who spoke broken English words of the same purport and meaning. This, it was held, was not a subject for expert testimony. The testimony offered, if admitted at all, the court said, would be received not as an expert's opinion, but because it came within that class of cases in which a witness may state the inference drawn by him from facts within ordinary knowledge occurring in his presence.

Familiar instances in which testimony of this kind may be given, the court says, are: whether two people were in love; whether a man was sick, or dazed, or despondent, or drunk; whether a dog was savage, or a horse gentle,—and, in general, any matter touching physical or mental manifestation or appearance, as well as all questions of identity, resemblance, duration, distance, dimension, velocity, noises, smells and many other matters where the inference drawn by an observer is commonly recognized and received as an equivalent for the congeries of facts that produce it. But testimony of this class, however, so far from being related to expert proof, rests upon diametrically opposite grounds.

The expert witness is one whose possession of special knowledge renders his opinion admissible upon a state of fact within his specialty, without regard to the manner in which the facts are established, and without requiring that they should have

come, in whole or in part, under the personal observation of the witness; whereas, the sole ground upon which a witness may give an opinion as to the matters of ordinary knowledge is that they not only came within his personal observation, but that they come into proof so blended with the opinion to which they give rise that it is receivable in proof as a substitute for a specification of the host of circumstances that called it forth.

A failure to observe this distinction results, at times, in the offer of an ordinary witness to give an opinion calling for special knowledge, merely because he has had actual observation of the facts, and at other times in the offer to prove an opinion upon a matter of ordinary knowledge arising from assumed facts, by a witness who has not himself observed them, upon the ground that he is expert upon the special subject. In either of these classes of cases the proof must be rejected; the rule being that mere opportunity will not change an ordinary observer into an expert, and that special skill will not entitle a witness to give an expert opinion when the subject is one where the opinion of an ordinary observer is admissible, or where the jury is capable of forming its own conclusion from facts susceptible of proof in common form.—*Jour. Amer. Med. Assoc.*

SHE—"What do you really think of me?"

HE (with sudden enthusiasm)—"What do I think of you? I think you are the sweetest girl I ever loved."—*Ind. Journal.*

ATAVISM INVOLVING THREE GENERATIONS.

Dr. Deane, of San Francisco, offers an instructive and interesting object-lesson occurring in my own experience of a family which I have had under observation for nearly twenty years.

In 1849, a young man and young woman were married in the Atlantic States; husband, sea-captain of good old stock, a man mentally above the average, with some literary requirements; a drinker, and I believe syphilitic; died a paralytic in 1876. Wife of good family, also, *petite*, negative disposition, moral qualities not highly developed, refined, still alive. To this man and this woman were born, from 1850 to 1868, eight children, four boys and four girls. Let us follow the lives of these children, beginning with the boys. The first born—a man now in the forties—has always been a good-for-nothing, a drunkard, associating with a class far beneath him, mentally and physically below normal; has never married. Second boy lost at sea. Third boy mentally and physically below normal, died of phthisis a few years ago. Fourth boy, mentally and physically the same as his brothers, appears to be developing phthisis, committed a murder a few years ago, and got off on the plea of self-defense, through influence brought to bear on the authorities. Married a woman far beneath him socially, has two children, oldest with dolichocephalic head and very delicate; the youngest I have not seen. Altogether, he is not a citizen that the community need be proud of. So much for the boys.

First girl, a woman about forty, developed early, physically and mentally, sexually at a very early age. Commenced running about at nineteen, French dinners, etc., with all their accompaniments; after several months of this kind of life she accidentally dropped into the hands of a man of the world greatly her senior, who took a fancy to her and saved her from herself, gradually drew her away from her evil associates, developed her mentally, and she promised to go through life a fairly respectable woman. In 1881 she married a man in good social position, who gave her a home with many of the luxuries of life, but the hereditary curse followed her, she began to change about two years since, and that appeared to light up again her sexual nature, like the last

sputter of a dying candle. She conceived a passion for a young man, a friend of the family, fairly threw herself at him and never let go until she had seduced him—a clear case of nymphomania. There came very near being a tragedy in consequence, the lover not suspecting to this day how near. The only redeeming point in this woman's life is, that God has denied her the power of perpetuating her kind. Perhaps when the menopause has passed she may settle down, although there appears a tendency in her to develop viraginity.

Second girl married early; very delicate; has had three children. First child an idiot; two children living, both below normal physically, with dolichocephalism strongly marked; mother developed during the last few years exophthalmic goitre; had her under treatment for some months and she improved on anti-syphilitics. Third girl died in infancy. Fourth girl is now about twenty-four and is physically the superior of any of the other children; there was a period of eight years between her birth and the last of the others; she is tall and well formed. How this girl will develop remains to be seen; mentally she has yet shown but little, but I think I begin to see some progress, and I should not be surprised if, perhaps, she was to redeem the family. An aunt of these children was insane. Dr. James Weir says, in an article of the *Medical Record*, "the phenomenon of atavism is more apt to occur in feeble types than in strong, healthy and well developed types." Here we have three generations to examine, each one apparently worse than the last; however, there is a law of compensation which luckily carries off these types early in life, and which seems to deny them the same prolific power of reproduction the healthy and well developed types attain to.

Certainly these people are hardly responsible for their acts any more than the hereditary drunkard. It is a disease, and they should be surrounded by influences from their youth which might counteract the unfortunate results to follow, not only to themselves but to those about them. Above all should our sons and daughters inquire carefully about the antecedents of families before becoming members thereof.—*Pacific Med. Jour.*

SOCIETY REPORTS.

SECTION ON ORTHOPÆDIC SURGERY OF THE COLLEGE OF PHYSICIANS
OF PHILADELPHIA.

(Meeting December 15th, 1893.)

The discussion of the subject "Torticollis" was opened by a paper entitled
SPASMODIC TORTICOLLIS AND ITS MEDICAL
RELATIONS,

By Dr. F. X. Dercum (see page 39), followed by a paper by Dr. Wharton Sinkler on
THE TREATMENT OF SPASMODIC TORTICOLLIS
BY CONIUM. (See page 46).

Dr. H. Augustus Wilson exhibited a patient, aged five years. Two years and four months ago, patient is said to have had quincy. Mother says the child suffered continuously for four months, which appears to cast a doubt upon the correctness of the diagnosis.

The following history was obtained from the mother: At the very beginning of her complaining of sore throat, her neck was stiff so that she could not move it in any direction. There was decided pain throughout chest and arms. Her sleep was disturbed. Upon arising in the morning, it was necessary for the patient to support both sides of her head with her hands on account of severe pain. This condition lasted for four months. Four months after she first noticed the crooked head, the patient came under observation at the Jefferson Hospital.

The diagnosis of caries of the upper cervical vertebrae was arrived at, four months after the first appearance of wry-neck, by the presence of a most marked muscular rigidity around the neck. The muscles in the upright position were tense and yielded only upon the patient being placed in a recumbent position, or when the head was well supported by the surgeon. The sterno-cleido muscles were in a state of relaxation when the patient was recumbent.

A brace was applied, which not only supported the head but maintained immobility and afforded protection, which she wore continuously until one month ago when it was removed. During the last two months of the use of the brace, it was modified so as to permit beginning motion of the head, but restrained the tendency of the head to turn to the right side.

At this time the following observations were made: Head turned to the right,—1½ inches from symphysis of lower jaw to line of mid-sternum. Flexion and extension not easily performed; rotation of head easily to right side, but motion to left impaired by right sterno-cleido-mastoid. When the head was so turned without effort on the patient's part, there was but slight over-action of the right sterno-cleido-mastoid. When the head is thrown backward, both sterno-cleido-mastoids appear alike, and the same obtains when the head is bent forward on the chest.

Left shoulder carried a little higher than right. There is a slight lateral curvature principally noticeable in dorsal region.

No movements are apparent in second, third, fourth, and fifth cervical vertebrae, which are less prominent than normal, while the sixth and seventh and the dorsal vertebrae move freely. The brace was adjusted towards the last so as to allow a little freedom of movement before it was taken off—about three months time was permitted from the time it was rigid to its removal.

Since the discontinuance of the brace, light gymnastic movements have been permitted, in order to develop the muscles that had become atrophied from disuse while the brace was applied rigidly. Since the head apparatus was made moveable, the patient has noticed a crepitus which was only of periodical occurrence and is now very much less marked than formerly, and appeared to be of the nature of fibrous adhesions.

DISCUSSION.

DR. J. K. MITCHELL: I have very little to say this evening, but should like to report two cases of spasmodic torticollis which present features somewhat different in character from the condition as it usually appears in children, although they were both in young people. My experience has been that this condition is more common in adults, and in them it is exceedingly obstinate to treatment. In children, the fixed form is more common, and either form is much more amenable to all remedies. Operation is more likely to be effectual in children than in grown persons, and this is true, likewise, as to treatment by mechanical measures. Apparatus alone will sometimes effect a cure, as is well illustrated by the interesting case just shown by Dr. Wilson.

My two cases were both in young people; one a man, about twenty, whom I saw in St. Mary's Hospital. He had refused operation, and had come into the medical ward for treatment. He had been handled in all sorts of ways, with drugs and various mechanical measures, without much benefit; nor at first can I say he improved at all, notwithstanding everything that we could do for him, until finally I gave very large doses ofgelsemium, with decided improvement, which, however, was not permanent until ice was applied. I did not try conium, which Dr. Sinkler found so effectual in some of these cases; but an ice-bag was kept upon the neck day and night, extending from the anterior border of the sterno-cleido-mastoid muscle back to the cervical spine, as low down as the origin of the nerve supplying the affected muscles. This was constantly worn, as I say, and by it the man was much relieved, the pain and spasm both diminished very much.

The second case was in a young girl and was undoubtedly of an hysterical character, a number of symptoms pointing, as you will presently see, in that direction. She came of a nervous family, and had persistently over-studied at school, which she was obliged to leave on account of the occurrence of a violent headache and a general rundown condition, with the exhibition of uncontrollable fits of temper. Her first complaint was pain on the right side of the nose, which extended into the eye, and for sometime at first was limited to this area. It comes on in paroxysms: with some twitching of the muscles of the face, and after it had lasted a few weeks, extended through the side of the face and neck as far back as the spine. It presently began to be accompanied by spasmodic movements of the sterno-cleido-mastoid and trapezius muscles, with some pain in both face and neck. These spasms occurred ten or twelve times a day, and every treatment entirely failed to relieve her. Massage, electricity, drugs,—nothing had any effect. I put her to bed, and on a milk diet, and for the first two or three weeks she grew better. Then the spasmodic movements began again, and during the succeeding month increased in their extent so that she had many times a day, general convulsions, usually opisthotonic. During the attacks, and sometimes between them, she had double strabismus, complete amblyopia, and pupils rigidly fixed in dilatation. At one time, in an access of despair, I bled her, having seen on one or two occasions bleeding do good in hysterical convulsions. We drew some 18 or 20 ounces, and for a week she was much better. Then she relapsed again, and, finally, when her family was worn out, and two or three nurses had been used up in the service, I took her to the Infirmary for Nervous Diseases, left her there with a strange nurse and under the mostly rigid rules of isolation, and from that day she had no attack of convulsions, the pain rapidly diminished and she is now perfectly well.

The case, as I have said, was of course of an hysterical nature, but at least one distinguished physician who saw it in consultation with me, was of opinion that she had meningitis at the base of the brain and would certainly die.

DR. J. K. YOUNG: The subject of Torticollis has been so thoroughly discussed this evening that there remains but the mechanical treatment to be considered. A great many mechanical appliances have been proposed, but most of them are unsatisfactory when applied. Torticollis is divided into two classes—congenital and acquired. Congenital cases are those which depend upon deficiency of the cervical vertebræ, malformation, uterine pressure, and adhesion between the amnion and the skin of the face as suggested by Peterson.

The acquired cases may be traumatic, tetanoid, paralytic, compensatory, cicatricial or idiopathic. It is obvious that in paralytic and tetanoid cases no operation is of service.

The simplest form of apparatus is that used by Dr. Ashhurst, and as originally suggested by Little. It consists of a piece of

adhesive plaster about the head, another one about the upper part of the thorax, and a firm muslin roller bandage from the chest region on the side opposite the chest and front. After operation the head may be placed in the correct position by means of a plaster-of-Paris bandage. The bandage which I prefer, in all operations upon the head and neck, is the starch bandage, which may be strengthened by strips of a wood bandage and strips of aluminum.

Another form of apparatus is the Minerva collar pattern, which may be made of felt, leather or other material.

The apparatus of Barwell, referred to under the title of "A cheap and simple apparatus for the treatment of torticollis and cervical caries" is the butterfly pattern. It may be made of felt, cut in shape and adapted to the head and neck.

Of the more elaborate forms are those on the principle of Jorg. Of this pattern there are several; the best one is that used by Dr. Schaffer of New York. It consists of an apparatus applied to the back, from which is erected a head piece and a chin rest, and which is attached by a universal joint which admits of its being placed in position. Sayres' apparatus is made upon the same principle.

Dr. Davis' appliance consists of a broad piece of stiff material fitted to the back, with a peculiar shaped head piece which is attached by means of a screw. Other good examples of this appliance are found in St. Germaine's work, page 239, under the title of Minerv de Bouvier and Ernst, of London.

Extension of the head is now used both abroad and in this country in the mechanical treatment of this condition. For this purpose Hilliard's appliance is more elegant than the ordinary extension head piece, and the one I exhibit, is the apparatus used by Dr. Willard in the treatment of cervical caries. When used for torticollis it must be longer upon one side so as to make more pull upon the affected muscles.

To render the subject more complete. I should perhaps refer to the method of DeLore of the forcible correction of posterior wry-neck. The patient under ether, is placed on the edge of the bed and forcible correction of the deformity is made. In cases where this operation is employed it is necessary to positively exclude cervical caries. I had related to me by a country practitioner, a case in which fatal results occurred in attempting to perform this operation. I have seen many cases of torticollis follow cold, and in such medical treatment has been effective in a few days. After tenotomy, I strongly urge the use of massage and gymnastic exercises.

Finally, I wish to refer to a number of cases of torticollis oculaire, which I have seen in the past two years. These are due to some loss of equilibrium of the ocular muscles, and they are usually corrected by the application of the proper prisms, the superior or inferior rectus being the muscle usually affected.

When torticollis is due to cervical caries, as it sometimes is, manipulation may produce serious results.

I think I can reply to the question of Dr. Wharton's in regard to the occurrence of mastoid tumor. There are two varieties of cases; in one there is a simple hæmatoma, in the other, rupture of the fibres of the muscle. In the latter variety of cases torticollis occurs. Previous to Whitman's paper, all statements upon this subject were without foundation in fact, and were simply quotations from the writings of Pieffen Bach.

DR. H. R. WHARTON: I agree with Dr. Willard in believing that good results follow operation in cases of fixed wry-neck. I have had some experience in the treatment of wry-neck, both in children and in adults, and I have seen marked benefit result from simple division of the sterno-cleido-mastoid-muscle.

Dr. Dercum mentions asymmetry of the face in connection with this disorder. I saw this well illustrated in a boy, recently under my care at the Children's Hospital, in whom there was asymmetry of the face and skull. I think the want of success in a good many operations is due to the fact that many of them are left without after treatment by apparatus, gymnastics, muscle stretching, etc. If this is not done relapse is sure to follow. In my opinion it is as important as the operation itself.

I should like to ask whether any of the gentlemen present have ever had any experience with wry-neck following congenital mastoid tumor. These tumors are often due to the rupture of some of the fibres of the mastoid in labor and we might therefore look for wry-neck in connection with this accident. A few of the cases I have seen of such tumors have not been followed by the development of wry-neck.

DR. BENJ. LEE: I came here this evening expecting to be simply a hearer and to be instructed, and I need hardly say that in reference to the latter expectation I have not been disappointed. Both the papers and the discussions have been of deep interest. The only point which occurs to me to refer to, is Dr. Wilson's case, concerning which I think we may say that we accept his diagnoses without hesitation. It recalls to me a case which I saw early in my practice, some twenty-five years ago. It was a very marked case of wry-neck in a child about four years of age. On my first examination I pronounced it to depend upon cervical caries. I applied suspension by means of a ratchet apparatus attached to the child's high chair, and in a few days marked improvement resulted. Suspension was kept up constantly during the day; she was never allowed to sit up except when the head was supported. In the course of a few weeks, I applied a brace with a head support. The wry-neck entirely disappeared and the case eventually recovered.

This leads me to say that I believe that in every case of wry-neck in a child, we should examine carefully to see whether there is not caries present. I believe the former is frequently an early symptom, and that long

before any deformity of the bones can be detected, we may find wry-neck, resulting from pressure on the nerves at the point of emergence, or from inflammatory irritation of the cord.

The attempt to overcome the muscular contraction in either spasmodic or spastic torticollis, by the sheer force of mechanical appliances, I believe to be very rarely successful. In this connection I would say however, that in many cases I have had good results from suspension, carried on systematically and persistently, and have attributed the improvement to diminished irritation of the nerve trunks. Contracted muscles, I think almost invariably depend upon a central irritation existing at least as far back as the point of emergence of the same from the vertebral column. Dr. Mitchell's case is very instructive and, to me, very interesting. I have been accustomed in all such cases to look for a centre of irritation in the pelvic region reflected to the upper portion of the cord. A rectal or vaginal examination will often reveal a source of irritation of some form either rectal, uterine or ovarian, in the pelvis. If this is relieved, we shall occasionally find to our great surprise and delight, a diminution of the central irritation with complete relief of the reflex affection.

DR. F. X. DERCUM: I do not deprecate tenotomy in fixed wry-neck; in spasmodic torticollis, however, it is certainly little more than a makeshift expedient. In regard to the tumor noted in the sterno-mastoid muscle in infants at birth, it is sometimes due to hæmatoma, sometimes to tear and inflammation of the muscles. When tears occur, fixed wry-neck is very apt to ensue. I think that we ought to be more careful in speaking of our results; cases of spasmodic torticollis are often reported as cured when they are only relieved. Very often indeed, we find a case recorded as cured and find that the account ends by stating, "In six months a slight return of the spasm occurred," or "A slight movement of the head only could be observed," and other expressions of like purport. Certainly while drugs, such as gelsemium, conium, and various surgical measures give marked relief, they generally fail to cure absolutely.

DR. J. HENDRIE LLOYD: In discussing the pathology of wry-neck it seems to me that it might be wise to pay more attention to the condition of the muscles; I know it is not the fashion to look for the possibility of this disease in the muscles either in the fibre or in the sheath. I have no scientific data upon which to found a statement that wry-neck is a myopathy, but it seems to me to be reasonable from the fact that this disease is not associated with any particular nerve trunk, but is distributed through irregular muscle groups.

It is popular to attribute all muscular involvement to central disease, which necessarily eliminates myopathia. I do not myself believe that we are on sufficiently firm ground to positively assert that all these troubles are located in some form of meningitis, or irritation of the nerve centres. In

recent years it has been found necessary to remove several diseases from the groups of central disease and to place them among the myopathies. This may yet have to be done with wry-neck.

I was much interested in Dr. Mitchell's case because it exhibits a not unusual form of hysteria. Hysterical torticollis has been described by French authors. It is simply one of the varieties of hysterical contracture. In his case the convulsive phenomena, the contracture, the fact that the patient was cured by isolation, are all very characteristic of hysteria.

DR. DEFOREST WILLARD: Dr. Dercum has spoken of the unsatisfactory results of myotomy of the sterno-cleido-mastoid muscle. While I grant that in a considerable number of cases myotomy does fail, yet in many instances it does give permanent relief. I have seen cases in which there has been no return of the spasm for fifteen or twenty years and this may be called permanent cure. There are a certain number of spastic cases which cannot be relieved by this operation, but in inflammatory troubles excellent results can be obtained from myotomy. I advise first, medical treatment; if it fails, then mechanical measures and myotomy; then neurotomy.

In regard to the question of subcutaneous or open section. At the present time we are much more inclined to the open method since there is less fear of sepsis than formerly. In a female, however, a large scar is annoying and in girls I perform subcutaneous tenotomy when it can be done with absolute safety. I make the puncture with a small oculist's knife so as to avoid the entrance of air even, should a vein be wounded.

In many cases if the sterno-cleido-mastoid is firmly stretched, and if a very blunt tenotome is carried along the posterior face of the muscle, there will be no injury to the vein and the muscle can be entirely severed without danger to other structures. If such division is not sufficient, the mastoid insertion is also divided, and abundant correction is secured. Gymnastics and muscle stretching should be practiced for a long time.

I recently saw a patient, a young girl upon whom I operated three years ago; her neck was in absolute straight position, and it was very difficult to decide on which side the operation had been performed. She had had continued gymnastics.

I have never seen the pleura injured except in one case. It was in a case of Dr. Agnew's, and the patient died from septic pleurisy. I believe that is the only case in this city where death has occurred from such cause.

I think that we ought to insist upon gymnastics being carried on after myotomy. Without it there is little use of tenotomy or nerve stretching.

When medicines, hypodermics, electricity, myotomy fail, I think it far better to excise a considerable piece of the nerve. It is better to attack the spinal accessory nerve high up before it reaches the sterno-mastoid, as then there is no reunion.

Dr. Rhein recently collected for me forty cases of neurectomy and nerve stretching on record, and his figures give eighty per cent. of cases which have remained cured. There was but one death, and that from erysipelas. Thorough excision is an operation justifiable in these cases of spasmodic contraction.

In rotary cases, division of the spinal nerves is, of course, the only operation which promises much hope. Simple division of the spinal accessory would not be of much service, but I do not think excision of all the nerves should be attempted until all other means have been exhausted.

If we are positive that spinal caries exists forcible reduction should be excluded.

The Treatment of Pneumonia in St. Francis Hospital.

Dr. Arnot Spence, states that after an experience with two hundred and twenty-eight cases the writer can recommend the following plan of treatment. In the first place, the bowels should be freely moved with five grains of calomel, well rubbed up with milk and sugar, or if the patient is too weak a more gentle laxative may be employed. A half-ounce of the following prescription may then be given every two hours:

R Tr. aconiti..... mxxiv.
Tr. opii camphoratae..... 3ij.
Liq. ammonii acetatis.
Syr. zingiberis..... ʒʒ ʒss.
Aqua, q. s. ad..... ʒvj.—M.

Sig. Half-ounce every two hours.

The aconite is given primarily for its effect on the heart and blood-vessels, and thus on the inflamed lung, and secondarily to reduce the temperature. It produces a quieting and slowing of the irritable and rapid heart, and a reduction of the arterial pressure, thereby lessening the amount of blood in the congested lung. It controls the temperature within a safe range, and prevents the marked exacerbations so common in typical cases of this disease. In strong and full-blooded patients, veratrum viride may be substituted for the aconite in this mixture, and used in about the same dose. The paregoric is added to ease the short and harassing cough, which is often such a disturber of rest. The spirit of mindererus acts as a diaphoretic, keeping the skin moist, and in its way relieving the kidneys to some extent. Besides assisting thus to keep the temperature down, it is also a stimulant.

Throughout the administration of this mixture the heart was most carefully watched to note the effects of the drugs, and, all things being favorable, it was continued until the fall in temperature denoted the crisis of the disease. When further stimulation seemed necessary, whiskey was freely given, but never unless it was indicated. The administration of alcoholic stimulants all through this disease, as is frequently done, is a practice capable of doing great harm.

CURRENT LITERATURE REVIEWED.

IN CHARGE OF ELLISTON J. MORRIS, M. D.

THE AMERICAN JOURNAL OF THE MEDICAL SCIENCES

for January. Dr. Maurice H. Richardson, contributes an interesting paper on

Appendicitis.

based on a personal experience of one hundred and eighty-one cases. He calls attention to the fact that the deaths from appendicitis are greater than one would suppose because, undoubtedly, many cases are diagnosed as typhoid fever or kindred diseases. The author says that the diagnosis is not always easy, and that it is often difficult to distinguish between this disease and certain others, though the history, with the local signs, is sufficient to make a diagnosis in the majority of instances. With very rare exceptions, a diseased appendix is the cause of all peritonitis, local or general, occurring in males. He says that not infrequently he has found a gangrenous appendix in cases where a diagnosis of internal strangulation had been made by the most experienced men. In all cases of general infection in which the lesion is obscure, the possibility of an appendicitis must be borne in mind.

Pain considered alone very frequently has no direct relation with the usual anatomical seat of the appendix. In making a diagnosis, therefore, the seat of the pain in the first hours of an appendicitis is of no great importance. Tenderness is a more important symptom for diagnosis than pain, inasmuch as this symptom is usually placed directly over the lesion.

The existence of vomiting of stercoraceous material, or of matter of a coffee color, he regards as a very serious symptom. The septic nature of the vomitus must also be taken into account where anaesthesia is used, because in several instances a fatal pneumonia has followed, or a septic bronchitis has complicated an otherwise favorable course.

In regard to the state of the bowels, he states that a large number of cases are accompanied in the first hours of the attack by more or less diarrhoea. In some the diarrhoea precedes the attack.

As to the time of perforation, he states, most unequivocally, his conviction that in all severe cases of appendicitis, there is a larger or smaller perforation, with extravasation. The first symptoms in severe cases of appendicitis depend upon a perforation, and not on a catarrhal or an ulcerated process in the interior of the appendix. In all cases of severe acute appendicitis, with localized peritonitis, seen immediately, or within a few hours, he believes that perforation already exists, and there is no question of waiting for perforation to take place on the third, fourth, fifth or any other day.

The state of pulse throws little light on the diagnosis, but is valuable for prognosis. In his experience a pulse of 120 in an adult is a

grave symptom as to prognosis, depending as it does, upon a serious constitutional infection. Its value, however, varies with the extent of the general peritoneal infection.

The temperature in this as in other forms of peritonitis has very little weight both as to diagnosis and prognosis. He has discarded the temperature almost entirely as a guide to prognosis. It is an aid to diagnosis, however; but too much stress must not be laid upon it. A very rapid respiration is always a grave symptom, unless it depends upon merely mechanical distention. Caused by septic absorption its existence is of the gravest import. In a certain percentage of cases it is due to some complication in the lungs.

Where distention exists, the abdomen should be carefully auscultated for evidence of intestinal action; for even in some cases of the greatest distention there is no paralysis of peristalsis. The existence of distention dependent upon a local infection is of the gravest import. Whether due to portal thrombosis or to local infection, with simple paralysis of peristalsis, no system is of more importance in the diagnosis and prognosis of the disease than a distended abdomen, accompanied by vomiting. Death almost always follows. The existence of sounds of intestinal action are not only reassuring but call for the exhibition of cathartics and the rectal tube.

Examination of the rectum should never be omitted in suspected cases. In those cases in which the diseased appendix hangs over the brim of the pelvis we almost always get rectal tenderness.

The author states that with one exception there has been marked leucocytosis in all the cases of perforation that have come under his care.

In regard to the treatment, the author believes that all cases of circumscribed abscess should be drained. The adhesions should not be broken between the abscess and the general peritoneal cavity. In a localized peritonitis of appendicular origin, where there is an adhesion to the abdominal wall the incision should be made through the most prominent part of the tumor. When the pus is reached, the abscess cavity should be drained by means of rubber tubing and gauze. If the cavity is very large and extends into the flank, flank drainage should also be used. The author thinks that drainage among the healthy intestines adds to the gravity of the case and for that reason is opposed to the tearing through of adhesions in cases of circumscribed abscess. Where it is possible to evacuate such cavities through the vagina the author believes that this is the best method to use. Nevertheless, drainage through the vagina and rectum is very unsatisfactory, and the author would not resort to this method unless the abscess was pointing unmistakably downward.

In the vast majority of cases the abdominal route must be selected on account of the abscess being unattached to the abdominal wall. Here every precaution must be taken to avoid contaminating the peritoneal cavity. The intestines should be protected by means of gauze and for this purpose the author prefers gauze sterilized by heat. Iodoform gauze he rejects on account of the dangers of absorption. In cases of localized peritonitis with probable general infection the adhesions about the appendix should be freed and the intestines thoroughly irrigated or wiped and every dependent portion carefully drained. Such cases should be operated on at the earliest possible moments, the earlier the better, just as soon as the gravity of the situation is realized.

In relapsing or recurring appendicitis the author believes that the operation should be advised and performed in all cases where, from frequent attacks, we are able to infer that there is chronic trouble. He thinks that it is a good plan to cauterize the base of the appendix before covering it in with peritoneum.

In regard to the use of the salines in appendicitis the author takes the ground that they may be given with safety in the majority of instances of catarrhal appendicitis, in appendicular colics, and even in slight extravasations not only in the outset but throughout the disease. Mild cases he thinks do not require salines but do just as well on opium. There is always danger that a mild case will become a fulminating one and in the latter condition and in all cases marked by a sudden onset salines or other cathartics should be avoided. On account of the danger of causing extravasation he believes that cathartics should never be used in the beginning of an attack of appendicitis—that the use of opium is far more rational, if anything must be used. After the disease has been going on long enough to cause firm adhesions or after the appendix has been removed, or when, having drained a localized peritonitis, gauze barriers have been placed to prevent extravasation, it is a different matter and cathartics are useful. But up to four or five days the adhesions are not strong and the increased peristalsis may cause extravasation, and rupturing the adhesions produce a fatal peritonitis.

The author urges the importance of a thorough bacteriological examination and states that the bacillus coli communis has been found in most cases of septic serous effusions into the peritoneum.

In regard to the prognosis, he states that it depends entirely upon the variety. In the mild cases, with one or two exceptions, recovery without operation has taken place. The prognosis in cases of localized peritonitis is almost invariably good. Recovery has been invariable where the operation has been limited to simple evacuation, unless an incipient general peritonitis existed at the time. The prognosis where appendicular abscesses have been opened and drained is good. In case of well-established general peritonitis, where

there is a severe constitutional infection, where the intestines are paralyzed by the local poison, the prognosis is invariably hopeless. Where there has been a serious attack of appendicitis, with an extensive localized peritonitis, or in those rare cases where recovery has followed a general peritonitis, a subsequent sudden perforation has been followed in several instances by the most rapidly fatal result.

Out of the 181 cases operated on there were 43 deaths—24.3 per cent. In practically all the fatal cases general peritonitis was the cause of death. One fatal result was due to delay in operating.

Dr. Charles L. Dana contributes a paper on

The Microbic Origin of Chorea,

reporting a case with the autopsy. As the results of his investigations the author believes that there is a meningitis of the cortex which extends into and in places involves the cortex. It is characterized by an active connective-tissue proliferation and the presence of diplococci in the meninges and cortex. In the meninges and cortex are small hyaline bodies which indicate a degenerative change of the brain substance. This degenerative change effects the deeper part of the brain to a less extent, extending down to into the capsule and lenticular nucleus, but not the optic thalamus. There is a meningitis with active vascular changes in the upper part of the cord which seems particularly to surround and effect the roots of the nerves as they leave the medulla and cord. The paper is illustrated by woodcuts of the patient and the microscopical appearance of a portion of the brain as well as a colored plate showing the hyaline bodies spoken of in the paper.

Dr. W. W. Keen reports

Four Cases of Brain Tumor, in Three of Which Operation Was Done—Two Operative Recoveries—Ultimate Death in All.

In the first case, the situation of the tumor was probably located correctly and trephining afforded a very great relief to most distressing symptoms. In the second, the tumor was almost exactly located, but, from the probable size and position of the tumor, and the condition of the patient, it was decided not to operate—a conclusion justified by the post-mortem. In the third, the position of the tumor was erroneously diagnosed, and an unwise operation was followed by death. In the fourth, the tumor was not recognized at the operation but was found at the suspected site at the post-mortem; the operation, while it could not afford relief, did no harm.

The author lays down the rule that tumors which are inoperable should be meddled with as little as possible. He also calls attention to the value of the amount of bulging of the brain as an indication of the size of the tumor, and which will, therefore, enable the surgeon to some extent to decide on the wisdom of greater or less interference in such cases.

The paper is illustrated by a portrait of one of the patients showing a peculiar bulging of the head after operation, and also the cuts of the brain showing the positions and size of the tumors. The paper will be continued in the next issue.

Protozoa and Carcinoma.

is the title of a paper by Dr. I. Adler. The author concludes his paper by saying that the existence of parasitic protozoa in cancer is probable, though the greater part of what has hitherto been described as parasitic is certainly not so. No constant or in any way specific organism has as yet been demonstrated beyond the possibilities of doubt. At present no facts, histological or otherwise, compel the assumption of a parasitic origin of carcinoma, while there are very strong and valid arguments against such assumption. Further study of the subject is urgently needed in the author's opinion.

The remaining papers in this issue are: "On the Neurosis following Enteric Fever known as 'The Typhoid Spine,'" by Dr. William Osler; and "Some unusual New Growths of the Vulva," by Dr. R. W. Taylor.

THE CANADIAN PRACTITIONER

for December. Dr. B. E. McKenzie contributes a paper on

Pott's Disease—its Early Diagnosis and Mechanical Treatment.

He summarizes the teaching of the paper as follows:

(1) Due attention to the following symptoms and signs will generally enable the surgeon to make a diagnosis before the stage of deformity has come:

(a) The *clinical history*—noting the *chronicity* of the case.

(b) The *peculiar carriage and gait* in walking.

(c) Pain in the *distribution of the spinal nerves*.

(d) *Muscular spasm* in the region affected.

(e) *Lateral or antero-posterior curvature, other than that so called angular curvature which marks the later stage of the disease.*

(f) The *disposition to recumbency*.

(2) Mechanical treatment, permitting the patient to be out of bed, is preferred in most cases to plans which necessitate recumbency and a life indoors.

(3) The principles embodied in the use of the plaster jacket most fully meet the indications. When necessary to employ a head support, the croquet hoop is one of the best.

(4) Rawhide is a better material to employ than plaster of Paris.

(5) The object sought in immobilizing the spine is primarily to allay irritation and to lessen physiological activity in the part affected; and, secondarily, to prevent unnecessary deformity.

Dr. A. F. McKenzie discusses

The Nature of Inflammation.

He concludes that

(1) It is a local process attended by structural, nutritional and functional changes in the part affected.

(2) While these changes are locally injurious, and in the case of wounds hinder or prevent the normal healing process, yet they are probably an effort at defence on the part of the organism and the tissues affected.

(3) While the most frequent essential cause of inflammation is probably a local invasion of pathogenic microbes, yet other causes may produce apparently the same effect.

(4) Considering the desirability of not making any unnecessary changes in our terminology of disease, it does not appear that our knowledge is at present accurate enough to warrant us in limiting the term inflammation to the result of a local invasion of pathogenic microbes.

(5) The antiseptic precautions which it is now considered necessary to take, and which, at least, are not apt to do any harm, are within the means and capabilities of ordinary practitioners, and he who is anxious to do the best he can for his patients will not likely neglect them.

Dr. T. K. Holmes reports "Two Cases of Laparotomy for Unusual Conditions." The first operation was performed for an ovarian abscess where the diseased condition was confined to the ovary, the fallopian tube being healthy. In the second case there was complete paralysis of the intestines requiring puncture of the gut to allow of the escape of gas. The patient recovered.

The remaining papers are "Mitral Stenosis," by Dr. G. A. Peters; "Rupture of the Heart," by Dr. J. L. G. McCarthy; and, in the clinical department the report of a case of "Cholecystotomy" with recovery, by Dr. J. W. F. Ross.

An Infant with Alcoholic Liver.

An inquest was lately held by the City of London Coroner on the body of an infant, aged six months, the daughter of a hawker. The mother deposed that she and her husband had tramped from Yarmouth to London, and that a doctor at the first-mentioned town had told witness to give the child some sherry and brandy, and so far as brandy was concerned, she had carried out his instructions. The medical man who made a post-mortem examination of the child deposed that the liver was four times the natural size, and that death was due to pneumonia. A verdict was returned in accordance with the medical evidence. A case of this kind is a forcible reminder that one cannot be too precise in giving directions to the uneducated friends of patients. Most persons familiar with the treatment of children's ailments know the value of brandy in emergencies. No sane practitioner, however, would order the prolonged use of alcoholic stimulants for children of tender age. The error probably lay in the failure of the Yarmouth doctor to impress on the mother that the spirit was to be used as a momentary stimulant only. —*Med. Press and Circular.*

PERISCOPE.

IN CHARGE OF WILLIAM H. BRICKER, M. D., B. SC.

MEDICINE

Treatment of Disease of the Appendix Vermiformis and its Results.

Drs. J. O. Affleck and John Duncan recently read papers on disease of the appendix before the Edinburgh Medico-Chirurgical Society. Dr. Affleck said that within the last fifteen years it has been proven that the vast majority of cases of what was designated typhilitis and perityphilitis are due to lesions of the appendix. Inflammation of its substance is the disease to which it is specially liable. It would seem that the appendix may simply be enlarged and inflamed as the result of a catarrhal process, either extending from the cæcum, or set up by the presence of an irritating concretion. The changes in the appendix may be of more serious character, in the form of adhesions, torsions, suppurations, ulceration, perforation, and even gangrene. In such instances there is not only localized peritonitis, but not infrequently a collection of pus. He suggests that its peculiar vulnerability may be due to its being an unused structure, and consequently to its lacking the natural vitality of the rest of the alimentary canal. Dr. Duncan observed that we meet with three distinct varieties of the disease, the diffused, the localized, and the relapsing. In the first variety, the moment it is ascertained that the peritonitis is purulent, laparotomy must be performed. In the second variety, the guide to operation is the presence of pus. In the third, or relapsing variety, if the determination to operate be arrived at, it is well to do so in an interval of quiet, when the inflammatory action is least pronounced. In all cases of the acute variety in which the diagnosis may contain an element of doubt, as well as in all cases where purulent peritonitis is fairly assured, the proper course is to incise, in the first place in the middle line. In operating in that class of cases in which the inflammatory action is localized in the region of the cæcum, the situation of the incision will be determined by the indications of purulent collection, always with a tendency toward the point opposite the anterior superior spine, which experience has shown is most convenient for reaching the appendix.—*Edin. Med. Jour.*

The Sort of Athletics for the Building of Strong Men.

Athletics have gained a strong hold upon college men (*American Lancet*). In fact, one hears more in the newspapers about Harvard's and Yale's athletic clubs than about their bright scholars. Many other colleges have won a certain notoriety by the success of their athletic clubs. A few years ago the writer knew a boy bright in scholarship, true

in his manly instincts, noble in all his conduct. He was fond of athletics, and won distinction in Yale both as a scholar and as an athlete. But shortly after his graduation he was attacked with a fatal disease of the lungs. For his athletic work large lungs were needed, but when he dropped such work the lungs in their degeneration fell an easy prey to disease, and the world lost the services of one of the noblest of spirits. Not long since, on a visit to a college where students indulge in foot-ball, the writer observed that many had effusion into the knee-joint. He was told this was the "foot-ball knee." At least one example was observed in which this disease finally necessitated the amputation of the leg."

"Base-ball fingers" have become quite a common deformity—one which cripples in many ways in most pursuits of life.

No sort of athletics compensates for bodily deformities. Every physician is familiar with cases in which over-development of muscles in the training for certain games has resulted disastrously. Excessively developed muscles may be good for show, but they are not good for healthy life, especially in brain workers. Athletics for competitive feats of strength and endurance are pernicious, illogical, and dangerous (Lydston). It were far better for the average boy or man to be content with perfect control and excellent nutrition of muscles of moderate development. Strong men are not best constructed by the so-called perfect training.

Brain-workers and those who lead sedentary lives are unwise in attempting to become general athletes. That sort of athletics is best which (1) is free from serious danger to life and limb; (2) is natural and pleasing to the individual taking it; (3) promotes a healthful flow of blood through every portion of the body, the more equably the better; (4) is regular as is the hour for meals and sleep; (5) permits cheerful companionship; (6) does not seriously disturb the ordinary duties of life. In short, those athletics are best for the student which are subordinated to his work as a student and the part he expects to take in after-life. Base-ball, foot-ball, lawn tennis, as friendly games for simple exercise, are well enough, but when entered into "to beat" they sadly lack the features needful to commend them to the thoughtful physician.—*Medical Review.*

Anæmia of Miners in Children.

A grave form of anæmia is produced by the presence of a worm in the intestine, the *Anchylostomum duodenale*, first described by Dr. Dubini, of Milan. The author has been able to observe twenty-one cases in children below the age of eleven. Intestinal symptoms are more common than in other

forms of anæmia. The anæmia becomes rapidly worse. The feces are very variable, often diarrhoeic, sometimes streaked with blood; in other cases the stools are normal. The diagnosis is based entirely on the examination of the fecal material, in which the eggs of the ancylostome are found. These are characteristic, being in segments—mono, bi-, poly-cellular. The eggs of the ascarides lumbricoides often accompany those of the ancylostome. The disease arising in an infected locality (such as mines, collieries), the presences of other anæmics in the family, especially if among them were miners or men in similar work, the resistance of the disease to different treatments, point to the diagnosis, and this is determined by the microscopical examination of the feces. The treatment is by the ethereal extract of malefern. The dose in children should not exceed four grammes, and should be given in an emulsion of some essence to conceal the disagreeable taste. It is necessary to repeat the treatment several times (four or five) at intervals of two to three days. As a contribution to the pathogeny of this form of anæmia, numerous experiments upon animals were made, which demonstrated very beautifully the auto-intoxication which takes place. After having prepared the toxine of the urine from two patients, after the method of Brieger-Otto, rabbits were inoculated with progressively increasing doses. The animals presented, from the first injections, all the characteristic symptoms of the anæmia in question. Quickly, upon stopping the injections, the animals returned to a state of health. Control experiments with urine of patients after the expulsion of the worms, produced no changes in the blood of the rabbits experimented upon.—*Bost. Med. and Surg. Jour.*

Frequency of Tuberculosis among Nurslings.

The examinations of the author (Enguelne) were bacteriological and pathological, as well as clinical. They were made with great thoroughness, but were confined to the institution children of the Hospice des Enfants Assistés at St. Petersburg. These researches gave the following results:

1. Tubercle bacilli were found in fourteen out of one hundred and twenty children, i. e., 11.7 per cent.; bacilli existed in the lungs in ninety-three per cent., in the bronchial ganglia in ninety-three per cent., and in mesenteric ganglia in eighty-six per cent.

2. Thoracic tuberculosis was found alone in seven per cent of the cases, abdominal tuberculosis alone in seven per cent, and both together in ninety-three per cent.

3. The age of children dying of tuberculosis varied from two months and four days to seven months and seven days.

The author also tried to find the relation of tuberculosis to all the autopsies of ten years, as shown by the gross pathology, with the following result:

1. The mortality of tuberculosis varied from 0.82 per cent to 5.18 per cent of the whole

number of autopsies, there being a mean of 2.62 per cent for the ten years.

3. Tuberculosis is most often first recognized between two and three months of age.

4. The increase and diminution of the number of cases of pulmonary inflammation, of intestinal catarrh, and of other affections bears a direct relation to the number of autopsies.—*Revue Mensuelle des Maladies de l'Enfance, Vratch, 1892.*

Early Symptoms of Rheumatoid Arthritis.

Mr. C. F. Griffiths contributes a paper on some neural phenomena of rheumatoid arthritis. The following are the phenomena to which he attaches the greatest importance. First, rapidity of pulse. Not in a solitary case, but in numerous instances, he has counted a pulse of 120, 130, 140, and even 160 to the minute; and yet the patient has been in all other respects non-pyrexial, and has not been subjected to any undue excitement, such as having just had a thermal bath, or exercise. Pigmentary cutaneous changes are of two very distinct forms—a diffuse melasmic discoloration, and a dark brown circumscribed spot, something like a mole, but not raised, and darker than the ordinary freckle. The next symptom is cold wet perspiration, notably of the hands, varying in degree from a mere clamminess to a profuse sweating, as if the hands had been dipped in water. This perspiration, however, is often found to be quite local, and it may be seen standing out upon the skin (especially the feet) following a defined course, as though influenced by one of the cutaneous nerves. There is often pain with this kind of perspiration; of a neuralgic character, and sometimes varying sensations of numbness and tingling. Fourthly, there is the true neural phenomenon of pain: not the pain which is associated with the disease-smitten joints, but that pain which occurring long before there is any evidence of arthritic trouble, Mr. Griffiths believes to be due to a perverted innervation of large nerve-plexuses, or a large area of nerve supply. This early pain occurs in the muscles of the thumb and inner side of the wrist, which suggests ulnar affection; ultimately the pain becomes more diffused and cannot be limited to any particular nerve area. This, especially when attended by the other phenomena, may, in most instances, be looked upon as the harbinger of the coming storm. Other neural symptoms are occasionally met with, such as loss of, or rather perverted sensibility of taste, interference with hearing, and severe gastric disturbances or migraine; and all these without any cause to account for them beyond the assumption that there lurks in the system a poison, of the exact nature of which we know little. As regards the respective values of these phenomena in the early diagnosis of chronic rheumatoid arthritis, that is, at a period before any arthritic or even constitutional symptoms have shown themselves, he thinks that the symptom of pain in localized areas is of very great importance and should be placed first; next, the increased

velocity of cardiac action; and then pigmentation. It will be readily assumed that should two or more of these symptoms appear synchronously or nearly so, the doubt would be pretty well turned into an almost absolute certainty.—*The Birmingham Med. Review.*

Croupous Pneumonia in Children.

Dr. Francis Hawkins in a paper read before the Medical Society of London, based on 228 cases, says: Most cases occur during March, May and July; the fewest in January, August and December. They, occur, as a rule, independent of antecedent disease, and in the great majority the onset could not be attributed to any definite cause. Fifty of the cases occurred under the age of five years, one hundred and twenty between five and ten, and fifty between ten and fourteen. The disease was most frequent at the ages of five and nine respectively.

Connecting his table with a further series of over seven hundred cases compiled by others, he found that the frequency of the affection gradually rose from the fifth to the twentieth year. Its onset was usually sudden and its chief symptoms of invasion were vomiting, cough and pain, while rigors and convulsions were very infrequent, and hæmoptysis extremely rare. An arrangement of symptoms into groups showed that the nervous system was the one most variously affected. The average daily temperature before crisis was 103° and 104° F., and in about one-seventh of the cases, the fever was of the hectic type, though in only three was such associated with pus in the pleural cavity. The sixth was the commonest day of crisis, it being very frequent on the seventh and eight days. In basic pneumonia it was rather later than in apical. A dull tympanitic note was often present before any differentiation was detected in the character of the breath sounds. In one hundred and forty-six cases, the base of the lung was attacked in sixty-nine, the apex in forty-five; in the remainder the seat of the disease was in other parts. The most rapid respiration noted was 68. Typical rusty expectoration was present in seven cases, the youngest being six years old. Pleurisy coexisted in sixteen cases, pus being found in three. Gangrene of the lung occurred once. A soft systolic murmur was detected as arising during the course of the disease in six cases. Pericarditis was noted in one case, the patient having had rheumatic fever previously. Albuminuria was discovered during the disease in seven cases, and herpes in thirty-six, being in one case on the wrist as well as the angle of the mouth. Delirium

was more frequent during the course of the disease than at the onset, and more in apical than basic cases. In the treatment, ice should be used with great caution when the pneumonia was on the left side, as the heart might become slowed and dangerous symptoms arise. As to alcohol, discretion was required to select the cases in which it was needed.—*Brit. Med. Jour.*

ARMY AND NAVY.

U. S. ARMY, FROM DECEMBER 31, 1893, TO JANUARY 6, 1894.

First Lieutenant Edward L. Munson, Assistant Surgeon U. S. A., is relieved from duty at Jefferson Barracks, Missouri, and will report in person to the Commanding Officer, Fort Assiniboine, Montana, for duty at that post.

By direction of the Secretary of War leave of absence for two months, to take effect on or about January 15, 1894, with permission to apply for an extension of one month, is granted Major John D. Hall, Surgeon.

NEWS AND MISCELLANY.

Excursions to the National Capitol.

The Royal Blue Line has arranged a series of personally conducted three day tours from New York, Newark, Elizabeth, Trenton and Philadelphia to Washington, under the supervision of Thos. Cook & Son, the famous Tourist Agents. The dates selected are January 25, February 15, March 8, 29, April 19, 26, and May 10 and 17. The rate from New York, Newark and Elizabeth will be \$13.00, from Trenton \$12.25, and from Philadelphia \$11.00, which will include transfers between depot and hotel and first-class hotel accommodations at Washington. The train will leave New York on above dates from station, foot of Liberty Street, 9.00 A. M., leave Newark, C. R. R. of N. J., 9.55 A. M., Elizabeth, Royal Blue Line, 9.31 A. M., Trenton, P. & R., 10.20 A. M., Philadelphia, 12th & Market Streets, 11.26 A. M., and 24th & Chestnut Streets, 11.42 A. M., and will arrive at Washington 3.00 P. M.

The tickets will be valid for the return journey on any Royal Blue Line train within three days, including first day of sale, thus affording tourists an opportunity to visit the public buildings and places of interest in and about the Capitol.

For more detailed information call on or write Thomas Cook & Son, 261, 1225 Broadway, New York, or 828 Chestnut Street, Philadelphia.

CHEKAN

IN THE TREATMENT OF

WINTER COUGH

Dr. Murrell, of the Royal Hospital for Diseases of the Chest, London, states as follows :

"Myrtus Chekan I have tested in fifteen cases of chronic bronchitis, all the patients with one exception being men. The age of the woman was 51 ; the ages of the men ranged from 36 to 58. They were all bad cases, most of them of many years' duration. Many of them had been attended at the hospital for some considerable time, and almost without exception they had in former years undergone much medical treatment with comparatively little benefit. Their occupations exposed them to cold, and wet, and draught, and in some instances they had the additional disadvantage of working in a dusty atmosphere. They complained chiefly of paroxysmal cough, with thick, yellow expectoration, and much shortness of breath on exertion. On physical examination of the chest, emphysema was detected, with or without a little rhoncus of the bases behind. *They were, in fact, ordinary cases of winter-cough.* The fluid extract of Chekan was ordered in two-drachm doses in a little water every four hours, the dose being usually increased at the expiration of a week to half an ounce. The medicine was always taken without difficulty. In all cases the patient obtained some benefit, and in most instances the relief was very marked. There was in a few days a decided improvement in the cough, expectoration was from the first easier and soon diminished in quantity, and finally the dyspnœa was less."

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